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ABSTRACT

This manual is designed to summarize the main features of the Alberta, Canada business education program and to make suggestions regarding the efficient management of resources, facilities, and equipment. The manual begins with overview materials that present the business program's rationale and philosophy, goals and objectives, an overview of the program, a schematic overview of the program, and objectives of related junior high school programs. Following these introductory materials, the manual is organized in six parts. The first part provides information on planning the business education program, including an overview of structure, matrix, course sequences, integrating computers, sample school programs, articulation, and student awards and scholarships. Part II provides guidelines for planning business education courses, and the third part contains an overview of the various subjects that make up the business curriculum. Part IV provides information on student evaluation; Part V covers the use of resources, including equipment and facilities. Professional development is the topic of the final section of the manual. Six appendixes provide forms useful in planning the business education program. (KC)

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Business Education Manual for Administrators, Counsellors and Teachers

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Curriculum

Alberta
EDUCATION

BUSINESS EDUCATION MANUAL for ADMINISTRATORS, COUNSELLORS AND TEACHERS

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Preface

The purpose of this manual is to summarize the main features of the business education program and to make suggestions regarding the efficient management of resources, facilities and equipment.

Administrators should find this document useful in helping them understand the purpose of the business education program within the context of their school system in order to allocate the necessary resources in the most efficient and effective manner.

Counsellors should find this document useful in assisting students to plan their courses.

Teachers and department heads should find this manual useful for planning programs and courses and for allocating resources.

Consultants in the Calgary and Edmonton Regional Offices of Alberta Education are available to help with specific program planning.

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Dr. Steve Kashuba	Education Consultant Business Education Zones 1, 2, and 3
Sharon Prather	Education Consultant Business Education Zones 4, 5, and 6 (1982-85) Program Manager Curriculum Branch (1986-)
Dorothy Haines	Education Consultant Business Education Zones 4, 5, and 6 (1986-)

The information included herein does not constitute government policy, nor mandate decisions for school systems. Local program decisions will necessarily reflect the needs of the student populations, community and the facilities available in the school.

The authors wish to extend their appreciation to the Associate Directors of Curriculum, Garry Popowich and A.A. (Scotty) Day who authorized development and publication of this manual. In addition, the following members of the Curriculum Branch provided invaluable assistance in the production of this document:

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PROGRAM RATIONALE AND PHILOSOPHY

Business Education is an interdisciplinary study of the principles, procedures and technologies within the business environment and thus plays a significant role in meeting the Goals of Schooling and Goals of Education in Alberta schools. Within this program a student has the opportunity to learn more about the role of a future participant within a productive society and to build a framework for a successful career. The knowledge, skills, attitudes and habits expected in business assist students, upon completion of high school, to respond to the opportunities and expectations of the world of work.

The development of the individual's potential in the areas of psychomotor, affective and cognitive domains is central to learning and instruction. Individuals discover themselves and realize their potential by interacting with ideas, technology and people. The world of business is an appropriate focus for this interaction.

Presented from the dual viewpoint of the individual as a consumer within the marketplace and a participant within the production cycle, the content of the business education program provides:

1. skills and knowledge all citizens need to participate successfully in the business world.

2. skills for immediate job entry.

3. skills and knowledge supportive of a business-related post-secondary program.

The continuum of experiences within the business education program starts with exploratory activities in junior high school and expands in scope and depth at the senior high school level. The program can meet the three general objectives while providing viable alternatives and challenge for students of all levels of ability and interests. The relevance of the program is further enhanced through the integration of technology and related practices throughout the program, helping prepare the student for the information age.

GOALS AND OBJECTIVES

The business education curriculum provides education ABOUT business for ALL students so that they become informed citizens, and education FOR business for SOME students in order that they become effective workers. More specifically, the purpose of the program is:

1. to provide a meaningful study of the business environment including the ideas, people, and technology of business.

2. to provide for the development and acquisition of business knowledge and skills which will be most useful and durable in a rapidly changing society.

3. to provide an opportunity for students to elect and pursue individual interests and specialization in the study of the business environment.

4. to develop acceptable communication and interpersonal skills.

5. to develop the thinking strategies and problem-solving abilities of students.

6. to provide an opportunity for students to relate and apply learnings in business education to other areas of study.

7. to expose students to the business environment for the purpose of acquiring information, gaining experience and testing ideas and hypotheses.

8. to provide for a general understanding of business and the development of skills for personal use.

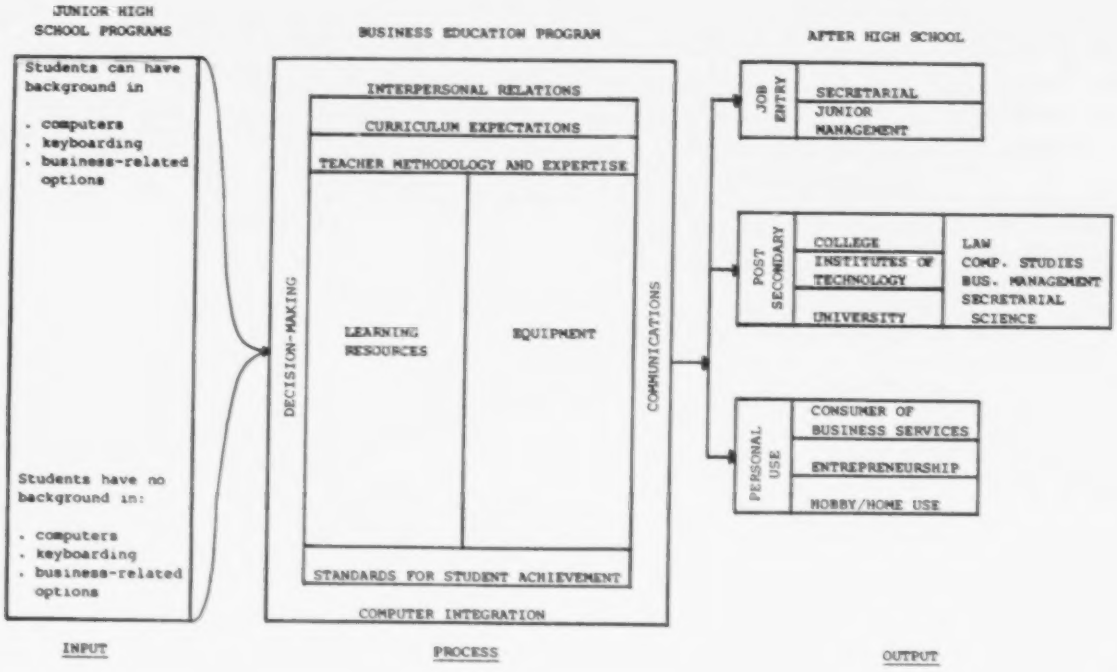
9. to provide background skills and knowledge for specialization in business and/or admission to post-secondary programs.

10. to prepare for job entry upon completion of senior high school and for future advancement in business.

AN OVERVIEW OF THE BUSINESS EDUCATION PROGRAM

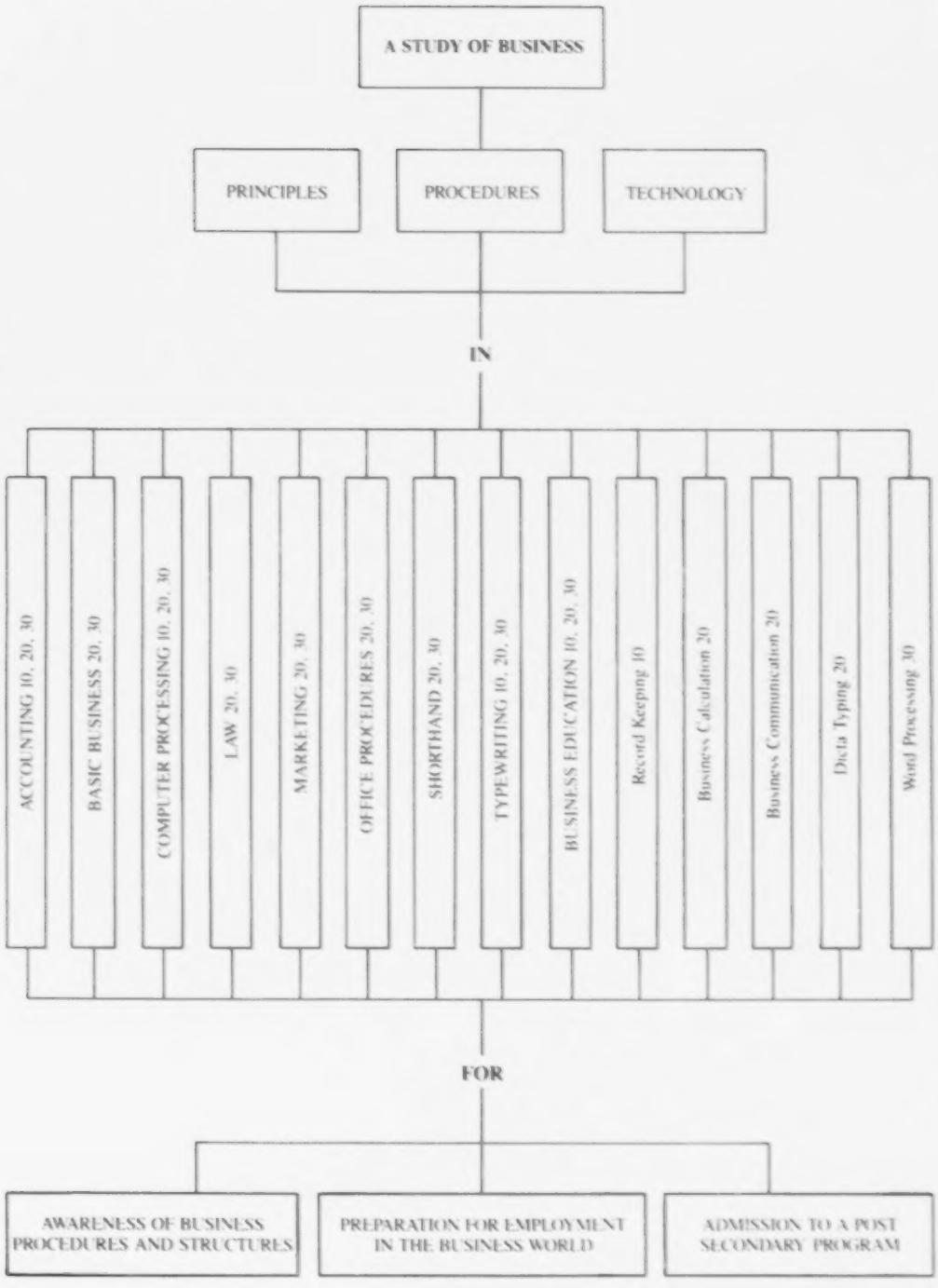
The business education program is available primarily at the high school level. It is a flexible program which is responsive to the varying related option courses which are available in junior high school, as well as to the varying aspirations of students when they leave high school.

Within the broad category of business education are eight separate, yet related, subject areas. Although the general objectives of the subject areas are related, the content is unique and often requires specific instructional strategies. Expectations for student achievement reflect the orientation (skill development or theory emphasis; vocational or personal use) of the course objectives. The following diagram outlines these relationships.



By ensuring that the content is relevant, by establishing appropriate expectations for student achievement, by maintaining a learning environment which reinforces business procedures and principles, and by providing opportunities to make decisions and to produce quality work in an efficient manner, students can build their skills and become increasingly confident in their ability to be successful in the world of work.

SCHEMATIC OVERVIEW OF PROGRAM



OBJECTIVES OF RELATED JUNIOR HIGH SCHOOL PROGRAMS

JUNIOR HIGH TYPEWRITING

This is a 75-hour program available to students in Grade 7, 8, or 9. The basic objectives of the program are the development of touch keyboarding skills and the transcription or production of basic skills, tables, and reports on a typewriter.

The goal of all typewriting instruction, irrespective of the grade level, is the same -- to develop the student's capability to use a typewriter correctly, to use the correct techniques of touch typing and to produce acceptable typescript. The expertise developed depends upon the time devoted to the practise of the skill, the maturity of the student, and the individual's interest and enthusiasm. A student's specific objectives for the eventual application of the skill will differ. For some, it may be for personal use such as typing notes, reports, letters and computer input. For others, it may be to explore aptitude for further development as a vocational skill. IT IS IMPORTANT THAT CORRECT TECHNIQUES BE DEVELOPED. Specifically, the objectives of the program are:

1. to acquire the proper techniques of keyboarding and to become familiar with basic machine operations.

2. to become familiar with common typewriting procedures.

3. to apply typewriting skills in the production of jobs for curricular and personal use.

4. to develop good work habits.

5. to produce typescript with acceptable standards of accuracy.

JUNIOR HIGH COMPUTER LITERACY

This program is to be offered as a complementary course (minimum time allotment should be 75 hours). While the program may be offered at either the Grade 7, 8 or 9 level it is recommended that maximum exposure of the program to the greatest number of students be a guiding principle in its implementation. Consecutive repetition of the program for the same group should be avoided. The course was designed with a Grade 8 target group in mind and, as such, some of the concepts may be too abstract for the Grade 7 student.

The program of studies consists of mandatory core and elective components. The core component consists of skills, concepts, interests and attitudes to be studied by all students taking the junior high computer program. This core component shall comprise 80% of the instructional time.

The elective component provides an opportunity for teachers to choose from a variety of suggested topics in order to complete the requirements of the program. Approximately 20% of the instructional program shall be devoted to the elective component. It is intended that this portion be utilized as a means of meeting student needs and exploring areas of student interest.

PART I:

PLANNING THE BUSINESS EDUCATION PROGRAM

OVERVIEW OF STRUCTURE

The structure of the business education program is designed to:

Allow schools/jurisdictions to implement programs which:

- reflect the needs of the community
- use available facilities/equipment efficiently
- make optimal use of teacher expertise
- reduce unnecessary repetition
- articulate with junior high programs/post-secondary programs

Increase opportunity for:

- competency-based evaluation
- individualized instruction

The content has been organized into core and elective modules within eight subject area strands. A ninth strand (Optional) includes a number of specific modules which may be grouped to form a "mini course" or may be integrated into the subject area courses. This structure gives schools considerable flexibility in program planning.

There are more alternatives, such as:

1. the number of credits for which a course is offered.

2. the scope of a course is defined by selecting specific modules (three modules for a 3-credit course, five modules for a 5-credit course).

Refer to "Guidelines for Structuring Business Education Courses" for more specifics.

"MODULE" DEFINED

A module has been characterized as a specific amount of subject matter and related activity, as set forth in the curriculum guide, to be covered within 25 hours of classroom instruction time. The reference to 25 hours of classroom instructional time has been established to provide more consistency across the province with regard to the depth to which a particular topic should be addressed. The variation in time available in a 3- or 5-credit course will require some adjustment as to how learning tasks are structured.

Each module defines:

1. the purpose(s) for the module.
2. status of the module (CORE/ELECTIVE).
3. prerequisites or corequisites.
4. equipment or facility requirements.
5. "TOPICS" which focus on the objectives for that module.
6. "LEARNING TASKS" which further define the "TOPICS".
7. "TEACHING NOTES" which clarify the "LEARNING TASKS" or offer suggestions as to how the learning tasks could be addressed.

CORE/ELECTIVE STATUS

Each module has a specific objective (purpose). Modules have been defined as CORE if the module objective and content are fundamental to the subject strand or offer an important component to the sequence of knowledge. When designating modules within the courses, CORE modules must be included at the introductory level.

CLASSROOM INSTRUCTION TIME has been defined as teacher coordinated activity that focuses on meeting the module and program objectives. This would include such activities as formal lesson presentations, drill and practise time, field trips, guest speakers, quizzes, tests, examinations, and review. Appendix 2 is a worksheet which helps a school to schedule modules and allocate class periods during normal classroom instructional time.

NOTE: Once the modules have been designated for a particular course, it is the teacher's responsibility to sequence the topics and learning tasks. In some instances topics and learning tasks need not be taught in the sequence shown in the curriculum guides. However, some courses such as TYPEWRITING and ACCOUNTING contain content that is sequential. For example, Accounting has five CORE modules. These five core modules must be taught in Accounting 10 if offered for five credits. If Accounting 10 is offered for three credits then three core modules must be taught, with the remaining two core modules being taught in Accounting 20.

COMPETENCY

The expectation for levels of student achievement (or competency) has been defined in "LEARNING TASKS". Learning tasks may indicate that students should understand the content or be able to apply or demonstrate a particular concept. The range in competency levels is:

1. awareness.

2. application.

3. mastery.

Modules that focus on skills emphasize the application and mastery levels. Modules that focus on theory tend to focus on the awareness and application levels of competency.

The external criteria for competency in senior-level business education courses are similar to those defined for entry-level employment in business.

MATRIX

SUBJECT STRANDS

(13)* ACCOUNTING		(10)* BASIC BUSINESS		(15)* COMPUTER PROCESSING	(10)* LAW	
		BB 20	C 1. Canadian Business	C 1. Computer Information Systems	LW 20	C 1. Nature of Law and the Civil Law System
C 1. Basic Accounting Concepts			C 2. Consumer Credit	E 2. Overview of Software		C 2. Contract Law
C 2. Journalizing and Posting			C 3. Insurance	E 3. Applications: Data Entry		C 3. Family Law
C 3. Completing the Accounting Cycle		BB 30	C 4. Economic Concepts	E 4. Applications: Word Processing	LW 30	C 4. Basic Rights and Responsibilities
C 4. Merchandise Accounting			C 5. Small Business Management I	E 5. Applications: Computer Simulations		C 5. Labour Law
C 5. End-of-Year Adjustments & 8-Column Worksheets			C 6. Management Techniques	E 6. Application: Data Base		C 6. Property Law
E 6. Optional Accounting Tasks		ELECTIVE	E 7. Personal Financial Planning	E 7. Applications: Electronic Spread Sheet	ELECTIVE	E 7. Criminal Justice System
E 7. Voucher System and End-of-Year Adjustments			E 8. Small Business Management II (Simulation)	E 8. Overview of Introductory Programming Language		E 8. Consumer Law
E 8. Departmentalized Tasks				E 9. Fundamentals of Input/Output		E 9. Tort Law
E 9. Partnership and Corporation Accounting				E 10. Introduction to Advanced Computer Programming Techniques		E 10. Controversial Issues
E 10. Cost Accounting				E 11. Advanced Computer Programming Techniques		
E 11. Financial Analysis				E 12. Extended Programming Project		
E 12. Accounting Simulation I				E 13. Introduction to Second Programming Language		
E 13. Accounting Simulation II: Computerized Accounting				E 14. Applications in Second Programming Language		
				E 15. Extended Project in Second Programming Language		
				E 16. Graphics		
				E 17. Systems Analysis and Program Development		
				E 18. Machine/Assembly Language		

(10)* MARKETING		(10)* OFFICE PROCEDURES	(10)* SHORTHAND	(15)* TYPEWRITING
MK 20	C 1. World of Marketing	C 1. Structure of the Business Office	C 1. Shorthand Theory 1	C 1. Keyboarding
	C 2. Advertising and Sales Promotion	E 2. Personnel in the Business Office	C 2. Shorthand Theory 2	C 2. Keyboarding, Centering and Tabulation
	C 3. Distribution of Goods and Services	E 3. Business Communication	C 3. Shorthand Theory 3	C 3. Letters and Essays
MK 30	C 4. Marketing Research	E 4. Records Management	E 4. Shorthand Theory, Dictation & Transcription 1	C 4. Reports
	C 5. Pricing and Financial Activities	E 5. Information Processing	E 5. Shorthand Theory, Dictation & Transcription 2	C 5. Letters & Tables
	C 6. Selling	E 6. Clerical Routines	E 6. Speed & Transcription Skill Building 1	C 6. Manuscripts
ELECTIVE	E 7. Display	E 7. Secretarial Routines	E 7. Speed & Transcription Skill Building 2	C 7. Tables, Business Forms & Financial Reports
	E 8. Purchasing & Controlling Merchandise	E 8. Office Specialties I	E 8. Speed & Transcription Skill Building 3	C 8. Business Correspondence
		E 9. Office Specialties II	E 9. Speed & Transcription Skill Building 4	E 9. Specialized Prod. Applications
		E 10. Office Simulation	E 10. Speed & Transcription Skill Building 5	E 10. Production Projects & Review
				E 11. Professional Applications I
				E 12. Professional Applications II
				E 13. Simulation I
				E 14. Simulation II

OPTIONAL

OPTIONAL

Subject to restrictions noted in the curriculum guides, these optional modules may be used to enhance the subject strand courses.

1. Record Keeping 1
2. Record Keeping 2
3. Record Keeping 3
4. Business Calculation 1
5. Business Calculation 2
6. Business Calculation 3
7. Business Communication — Development
8. Business Communication — Practice
9. Business Communication — Integration
10. Business Research Project
11. Goal Setting and Career Development
12. Dicta Typing 1
13. Dicta Typing 2
14. Word Processing 1
15. Word Processing 2
16. Business Simulation

MINI COURSES

(3)* RECORD KEEPING 10	(3)* BUSINESS CALCULATION 20	(3)* BUSINESS COMMUNICATION 20
C 1. Record Keeping 1 C 2. Record Keeping 2 C 3. Record Keeping 3	C 1. Business Calculation 1 C 2. Business Calculation 2 C 3. Business Calculation 3	C 1. Business Communication — Development C 2. Business Communication — Practice C 3. Business Communication — Integration

(3)* DICTA TYPING 20	(3)* WORD PROCESSING 30
C 1. Dicta Typing 1 C 2. Dicta Typing 2 C 3. Business Simulation	C 1. Word Processing 1 C 2. Word Processing 2 C 3. Business Simulation

BUSINESS EDUCATION 10-20-30

(30) BUSINESS EDUCATION 10-20-30

Modules from any of the 8 subject strands, and/or the Optional strand may be combined to form three, five or ten credit courses at the 10, 20 or 30 level. The courses are sequential. Elective modules may only be included in a program when core modules have been completed. Care should be taken to ensure that student programs do not duplicate modules.

***Refers to maximum credits available.**

Note: Core modules are prerequisite to elective modules.

Code: C — Core
E — Elective

COURSE SEQUENCES

Courses listed on the same line and to the left indicate a prerequisite. The maximum credits available to a student for use on a high school diploma is shown in the left column. Whether the course may be offered for 3 and/or 5 credits is shown in brackets following the course name. Some courses have additional prerequisites. These are indicated with solid lines.

Maximum Credits			
13	1501 Accounting 10 ..... (3)(5)	2501 Accounting 20 ..... (3)(5)	3500 Accounting 30 ..... (5)
15	1527 Computer Processing 10[1] ..... (3)(5)	2527 Computer Processing 20 ..... (3)(5)	3527 Computer Processing 30 ..... (3)(5)
	1529 Computer Literacy 10 ..... (3)		
10		2541 Basic Business 20 ..... (3)(5)	3541 Basic Business 30 ..... (3)(5)
30	1542 Business Education 10 ..... (3)(5)(10)	2542 Business Education 20 ..... (3)(5)(10)	3542 Business Education 30 ..... (3)(5)(10)
3	1550 Record Keeping 10 ..... (3)		
3		2566 Dicta Typing 20 ..... (3)	
15	1565 Typewriting 10[2] ..... (3) (5)	2565 Typewriting 20[2] ..... (3)(5)	3565 Typewriting 30 ..... (5)
3			3567 Word Processing 30 ..... (3)
10		2555 Shorthand 20 ..... (3)(5)	3555 Shorthand 30 ..... (3)(5)
10		2545 Office Procedures 20 ..... (3)(5)	3545 Office Procedures 30 ..... (3)(5)
3		2543 Business Communication 20 ..... (3)	
3		2544 Business Calculation 20 ..... (3)	
10		2430 Law 20 ..... (3)(5)	3430 Law 30 ..... (3)(5)
10		2540 Marketing 20 ..... (3)(5)	3540 Marketing 30 ..... (3)(5)

[1] Either Computer Literacy 10 or Computer Processing 10 may be used as the prerequisite to Computer Processing 20, but only one will be accepted for credit. In the Computer Processing 10-20-30 sequence, or alternatively Computer Literacy 10 - Computer Processing 20-30 sequence, a maximum of 15 credits has been set.

[2] Typewriting 10 is required for Dicta Typing 20; Typewriting 20 is required for Word Processing 30, Shorthand 30, and Office Procedures 30.

PLANNING THE PROGRAM

The modular format used in the business education program provides an opportunity for schools to plan programs which meet the needs of the students, to take advantage of teacher expertise, and to utilize the resource and facility support available within the school.

This opportunity to decide the program content requires teachers and administrators to make short- and long-range plans and to decide which courses will be offered, which modules selected, as well as how such courses and modules will be timetabled.

To respond to the evolving and specialized needs, schools can tailor the courses to the students' needs by:

1. selecting appropriate modules from the subject strand and/or the optional strand.

2. providing alternate resources (i.e., advanced word processing software, programming in a second (third) language).

3. offering alternative courses designed for specific groups.

INTEGRATING COMPUTERS

Many courses in the high school program deal with computers. It is important that the programs complement, not duplicate, each other. High school courses such as mathematics, science, social studies, language arts, music and art are also integrating computers. These courses could take advantage of the complementary nature of business education courses. Skills taught in courses such as computer processing and typewriting can provide basic computer orientation and skill in the use of software such as word processors and spreadsheets which may be used in other subject areas.

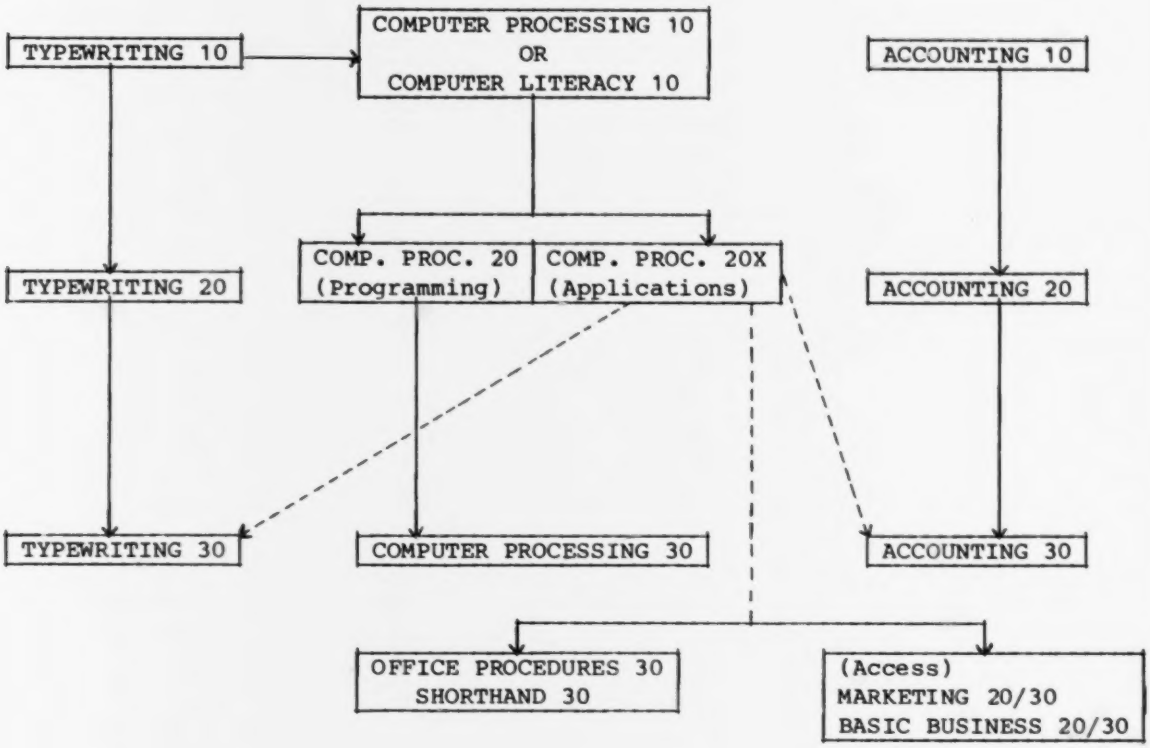
By selecting modules at the school or school system level, computer courses can be designed to meet the needs of students:

1. who have more interest in and will be more successful in learning to use the various productivity packages, but have difficulty with intermediate and advanced programming concepts.

2. who want to learn how computers work and who have the ability to learn programming languages and other specialized programming functions.

3. who have a strong computer background when entering high school, either through instructional programs they have taken in elementary and junior high school or through private study and wish to use the computers in more sophisticated applications than are available within the standard curriculum.

Equally important as the complementary nature of the computer and typewriting programs with existing curricula is their proper sequencing within the business education courses. For example, instruction of keyboarding (Typewriting 10) should precede work on productivity software and computer programming (Computer Processing 10); instruction of software application packages such as word processors, data bases and spreadsheets should occur before students use these packages in Office Procedures 30, Accounting 20-30, or Typewriting 20-30. The following diagram outlines how computer courses may relate to other business education programs in a complementary fashion.



The Computer Processing 10-20-30 program, in particular, benefits from a modular approach. As suggested earlier, such an approach offers teachers and administrators flexibility in their curriculum planning. Of the eighteen modules that are available, one module is core, six have a software emphasis, five introduce or continue programming language skills, three offer a second (or third) programming language, and three offer specialized programming functions.

In addition, modules from the Business Education 10-20-30 Curriculum Guide can be accessed for additional emphasis on research, simulations, and word processing.

COMPUTER-RELATED TOPICS/FUNCTIONS INTEGRATED WITHIN BUSINESS EDUCATION PROGRAM

FUNCTIONS	INCLUDED IN COURSES/MODULES
Keyboarding - introduction to touch "typewriting"	Typewriting (Modules 1-3)
Typewriting - speed and accuracy skill development	Typewriting (Modules 1-14)
Production of letters, reports, tables, forms	Typewriting (Modules 3-14) Office Procedures (Modules 8-10) Word Processing 30 Shorthand (Modules 4-10)
Programming in BASIC*	Computer Processing (Modules 8-12)
Programming in other languages*	Computer Processing (Modules 8-15)
Programming with graphics	Computer Processing (Module 16)
Systems analysis	Computer Processing (Module 17)
Word Processing - personal use - professional	Typewriting (Modules 1-3) if on computers Computer Processing (Module 4) Typewriting (Modules 3-14) if on computers Office Procedures (Modules 8-10) if on computers Word Processing 30 (must be on computers) Shorthand (Modules 4-10) if on computers
Data Base	Computer Processing (Modules 2, 5) Basic Business Marketing
Spreadsheet	Computer Processing (Module 2) Accounting (Modules 6, 7-13)
Accounting (General Ledger)	Accounting (Modules 6-13)
Telecommunications - Electronic Mail - Bulletin Boards - External Data Base	Computer Processing Office Procedures Typewriting Basic Business Marketing Law
Simulations - Management Decisions - Economic Choice - Budget	Marketing Basic Business Accounting Computer Processing

SUGGESTIONS FOR PROGRAM PLANNING

1. Assess the Present Program

- Determine areas that can be improved in the present program.
- Assess student needs and business needs in terms of manpower.
- Review student, business, and community response to the program.
- Evaluate equipment, furniture and resources.
- Assess teacher expertise.
- Assess present career opportunities.

2. Make Long-Range Plans

- Develop a goal statement.
- Assess effectiveness of interim business education program.
- Make long-range plans for business education program.
- Identify equipment/resource needs within budget constraints.
- Make plans to assess impact of the program on:

  - other school programs
  - career opportunities for students.

- Plan for teacher inservice re: new content and evolving technologies.

3. Make Short-Range Plans

- Draft an interim business education program:

  - decide which subject areas should be taught
  - decide number of credits to be offered
  - decide at which level to offer courses
  - identify modules for each level
  - obtain necessary resources.

- Plan for articulation with junior high programs, post-secondary programs and other school programs.
- Provide for support in school scheduling and counselling.
- Plan for teacher inservice (resources, lesson planning, etc.).

ASSESSING COURSE OFFERINGS

Within program planning, the selection of courses and modules best-suited to students' needs should be addressed.

Some Questions to Ask:

- Do students have the opportunity to develop job-entry skill levels for secretarial or business management careers?

- Do all students have an opportunity to access those portions of the program necessary for effective interaction with the business world?

- Will the needs of special students be met? How?

- Are programs designed to maximize articulation with post-secondary programs?

- Do students have an opportunity to experience the work environment during their program?

- Are available learning resources used in an effective way?

- Do students have access to suitable resources to meet the program objectives?

- Does the program reflect present business standards?

- Are students made aware of present business procedures?

- Will evolving technologies be emphasized?

- Are student follow-up studies conducted?

- Are business community resource people involved in development and implementation stages of program delivery?

ALTERNATIVE PROGRAMS WITHIN BUSINESS EDUCATION

The business education program includes content which is suitable for:

1. students who wish to access content available in business education courses because of personal interest.

2. students who wish to develop a level of skill and knowledge that would qualify them for job entry when leaving senior high school. Students could specialize in:

   a) secretarial skills, or
   b) business management.

   In addition, a carefully planned vocational program can lead to advanced or preferred placement in some post-secondary programs.

3. students who have special learning needs.

The chart on page 22 provides some suggestions for developing a school program for each of these alternatives.

In addition, certain modules are particularly suited to students with special needs. For example, gifted and talented students would benefit from the opportunities to research, simulate, set up, or experience actual business situations. Or, alternatively they could focus on the advanced modules in the subject strands. Programs for students with learning difficulties can be designed to reinforce or reteach basic skills through application within a business environment. For example, if Record Keeping 10 were to be taught prior to Accounting 10, less capable students would have a better opportunity for success in Accounting 10.

The structure of Business Education 10-20-30 allows schools to design unique programs to meet particular needs.

MAJOR CAREER ROUTES IN BUSINESS EDUCATION PROGRAM

(Recommendations for Module Selection)

		PREPARE FOR JOB ENTRY					
	Course Sequences (Credits Available)	Business Management	CERTIFICATE	Secretarial	CERTIFICATE	General Interest	Enhance from Optional Strand
13	Accounting 10 (3) (5) 20 (3) (5) 30 (5)	All Modules	13 Cr.	1, 2, 3 4, 5, 6	6 Cr.	1, 2, 3	
10	Basic Business 20 (3) (5) 30 (3) (5)	All Modules	6 Cr.	1, 2, 3	3 Cr.	1, 2, 3	5, 7, 8, 10, 11, 16
15	Computer Processing 10 (3) (5) 20 (3) (5) 30 (3) (5)	1, 2, 3, 4, 5, 6, or 7	10 Cr.	1, 2, 3, 4, 5, 6, or 7	6 Cr.	All Modules	10, 16
10	Law 20 (3) (5) 30 (3) (5)	1, 2, 3, 4, 5, 6	3 Cr.	1, 2, 3	3 Cr.	All Modules	10
10	Marketing 20 (3) (5) 30 (3) (5)	1, 2, 3, 4, 5, 6	6 Cr.			1, 2, 3	6, 9, 10, 11
10	Office Procedures 20 (3) (5) 30 (3) (5)**	1, 2, 3, 4, 5, or 6	3 Cr.	All Modules	8 Cr.	1, 2, 3, 4, 5	7, 8, 9, 11, 12, 13, 14, 15
10	Shorthand 20 (3) (5) 30 (3) (5)**	1, 2, 3	5 Cr.	All Modules	5 Cr.	1, 2, 3	7, 8, 16
15	Typewriting 10 (3) (5) 20 (3) (5) 30 (5)	1, 2, 3, 4, 5	5 Cr.	All Modules	15 Cr.	1, 2, 3	12, 13, 14, 15, 16
3	Business Communication 20 (3)	7, 8, 9	3 Cr.	7, 8, 9	3 Cr.	7, 8, 9	
3	Business Calculation 20 (3)	4, 5, 6	3Cr.	4, 5, 6	3Cr.	4, 5, 6	
3	Record Keeping 10 (3)					1, 2, 3	
3	Dicta Typing 20 (3)*			12, 13, 16	3Cr.		
3	Word Processing 30 (3)**			14, 15, 16	3 Cr.		
30	Business Education 10 (3) (5) (10) 20 (3) (5) (10) 30 (3) (5) (10)	Refer to Planning Worksheets					

Recommended Minimum Credits for a Certificate: 35 credits.

Note: A maximum of one module from the optional column may be selected in a 3-credit course and two optional modules in a 5-credit course.

* Requires Typewriting 10 as a prerequisite.
** Requires Typewriting 20 as a prerequisite.

SAMPLE SCHOOL PROGRAMS

When planning to offer business education courses and/or major routes within the program, it is important for school administrators to consider several important factors. Among them are the following:

1. Does the school offer an appropriate ratio of business education course credits to total high school credits? Care should be taken to avoid an imbalance between total credits offered in practical arts and total credits in academic courses.

2. Considering the enrolments in the high school, how many business education courses can be offered? Should courses be rotated or alternated from year to year? Can two or more courses from a major subject area or strand be offered concurrently?

3. Can proposed business education courses be offered in existing laboratories by the current complement of professional personnel using current print and non-print resources?

High Schools With Fewer Than 100 Students

High schools with fewer than 100 students should give priority to offering courses that have high enrolments across the province such as typewriting, accounting, law and computer processing. Lower enrolment courses such as basic business, office procedures, shorthand and marketing can be offered during alternate years or on a continuing basis in Business Education 10-20-30.

An example of a three-year business education program for a small school might look like this:

Student Enrolments Under 100

Year 1

Typewriting 10 (3) or (5)
Accounting 10 (3) and 20 (3) (offered concurrently)
Computer Processing 10 (3)

Typewriting 20 (5) and 30 (5) (offered concurrently)
Business Education 10 (5)
- Law, Module 1
- Law, Module 2
- Basic Business, Module 1
- Basic Business, Module 2
- Business Calculation, Module 4 from Optional Strand

Teacher time equivalent to 19 or 21 credits.

Total business education course credits: 27 or 29

Percentage of business education credits: $\frac{A}{B} \times 100 = \_\_\_\_\%$

where: A = Course credits available in business education.
B = Total high school credits.

If high school offers a total of 170 course credits, the ratio of business education credits to total high school credits is $\frac{29}{170} \times 100 = \boxed{17\%}$

Year 2

Typewriting 10 (3) or (5)
Accounting 30 (5)
Computer Processing 10 (3)
Computer Processing 20 (3)

Business Education 20 (5)
- Law, Module 3
- Law, Module 4
- Marketing, Module 1
- Marketing, Module 2
- Business Communication, Module 7 from Optional Strand

Teacher time equivalent to 21 credits.

Total business education course credits: 21

If high school offers a total of 170 course credits, the ratio of business education credits to total high school credits is $\frac{21}{170} \times 100 = \boxed{12.3\%}$

Year 3

Typewriting 10 (3) or (5)
Accounting 10 (3) and 20 (3)
Computer Processing 10 (3)

Typewriting 20 (5) and 30 (5) (offered concurrently)

Business Education 30 (5)
- Law, Module 5
- Law, Module 6
- Goal Setting, Module 11 (Optional)
- Business Research, Module 10 (Optional)
- Office Procedures, Module 1

Teacher time equivalent to 21 credits.

Total business education course credits: 29

If high school offers a total of 170 course credits, the ratio of business education credits to total high school credits is $\frac{29}{170} \times 100 = \boxed{17\%}$

ARTICULATION

An important goal in education is to optimize a student's learning opportunities. A number of programs complement the content included in the business education program. Careful sequencing of these courses will enhance the opportunities for the student to learn and make efficient use of the credit time available.

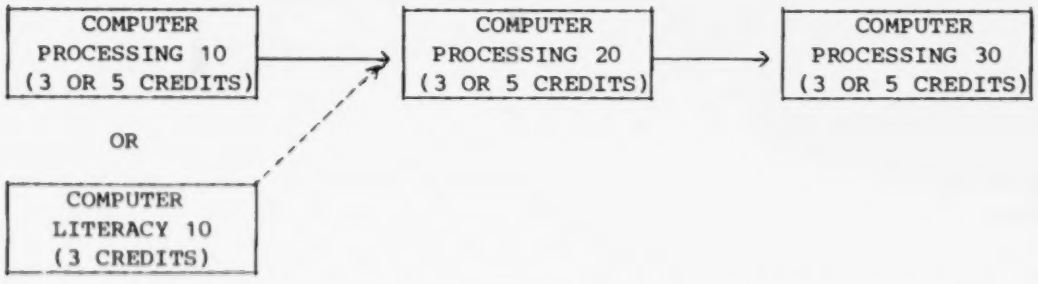
Junior High Typewriting

The objectives for junior high typewriting and Typewriting 10, Modules 1 and 2, are basically the same. Both focus on building sound typewriting techniques that can be applied to personal use or will form a foundation for vocational use. Less effective use of credit time can result in a situation where students registered in Typewriting 10 have also taken junior high typewriting.

It is preferable to separate students who have been successful in junior high typewriting from those who have no previous experience or who have been unsuccessful in junior high typewriting. Students who have mastered the keyboard in junior high typewriting should review the keyboard quickly and focus on speed and accuracy skill development.

Junior High Computer Literacy and Computer Literacy 10

Junior high computer literacy is a complementary course which provides an introduction to microcomputer hardware and introduces programming skills. Computer Literacy 10 (3 credits) has similar objectives. The Computer Processing 10-20-30 program reviews and expands the programming skills and builds software application skills. The emphasis and scope of the program will depend on the modules included in the courses. Many classrooms will find individualized instruction a viable alternative for the variance in student ability and expertise in this subject area. Students' programs can be designed to include modules that offer new information and/or challenge their abilities. The following charts may assist schools in sequencing the computer processing and computer literacy courses.


COMPUTER PROCESSING 10 (3 OR 5 CREDITS)
COMPUTER PROCESSING 20 (3 OR 5 CREDITS)
COMPUTER PROCESSING 30 (3 OR 5 CREDITS)
OR
COMPUTER LITERACY 10 (3 CREDITS)

Note: The maximum number of credits a student can obtain on a high school diploma in Computer Processing 10-20-30 and Computer Literacy 10 is fifteen.

Senior High School Program Alternatives

1. CP 10 (3) or (5) ⟶ CP 20 (3) or (5) ⟶ CP 30 (3) or (5)

2. CL 10 (3) ⟶ CP 20 (3) or (5) ⟶ CP 30 (3) or (5)

3. CP 10 (3) or (5) ⟶ CP 20 (3) or (5) ⟶ CP 30 (3) or (5)
   OR
   CL 10 (3)

Work Experience 15-25-35 and Work Study

These cooperative education programs offer an excellent opportunity for senior-level students to apply their skills and knowledge in an actual business situation. It is particularly valuable for those students enrolled in business education programs which emphasize secretarial or business management skills. Alternatively, junior-level students may find the on-site experience valuable in determining future career goals. Two modules in office procedures can be enhanced by one module from the Optional strand. An effective in-school component for the work experience programs is offered as follows:

Module 1 Structure of the Business Office.
Module 2 Personnel in the Business Office.
Module 11 (Optional) Goal Setting and Career Development.

Record Keeping and Accounting

The content in Record Keeping 10 provides a basic, personal use orientation to financial records. Students with learning difficulties may have more success in Record Keeping 10 than in Accounting 10. Students who have been successful in Accounting 10, 20, or 30 will find the content in Record Keeping 10 redundant.

STUDENT AWARDS AND SCHOLARSHIPS

School-Based Awards

A number of school jurisdictions or schools have instituted an awards program for students registered in business education courses and/or programs. Certificates, cards, pins, and charms can be given to students who have attained a specific level of skill proficiency in such courses as typewriting, business calculation and shorthand. Students registered in business education programs receive certificates or some form of recognition if they have attained a certain final grade (e.g., 65%) in a specified number of business education courses which, for example, total 35 credits. Refer to "Major Career Routes in Business Education Program", page 21 of this manual, for recommendations regarding selection of modules and credit minimums for certificates.

Awards from Associations/Business

A number of associations and/or businesses offer awards to students in business education. These tend to be available locally and provide excellent motivation for the student as well as encourage positive school-community relations. Such groups as Chamber of Commerce, Administrative Management Society, and Executive Women's International have been involved in awards programs which are directed at the business student.

PART II:

PLANNING
BUSINESS EDUCATION COURSES

GUIDELINES FOR STRUCTURING BUSINESS EDUCATION COURSES

General Guidelines

The structure of the business education program allows schools to design courses to meet the specific needs of the students in that school. The content has been arranged in sequenced and unsequenced modules organized under the following eight main subject areas or strands.

1. Accounting 10, 20 and 30
2. Basic Business 20 and 30
3. Computer Processing 10, 20 and 30
4. Law 20 and 30
5. Marketing 20 and 30
6. Office Procedures 20 and 30
7. Shorthand 20 and 30
8. Typewriting 10, 20 and 30

Subject to the constraints outlined in the curriculum guides, modules are to be formatted into 3- or 5-credit courses within each strand. Schools or school jurisdictions should designate three modules for a 3-credit course and five modules for a 5-credit course. The optional strand modules may be used to enhance the subject area strands or, alternatively, be combined to form 3-credit courses.

The program to be offered should be established through consultation among teaching, guidance, and administrative personnel. In order to promote consistency between grade levels and establish appropriate standards for student evaluation, jurisdictions may wish to monitor the selection of modules. Care should be taken to ensure that students' programs do not repeat certain modules.

Business Education 10, 20, and 30

In addition, or as an alternative to the courses designated under the subject strands (i.e., Typewriting 20, Law 30, etc.) 3, 5, or 10 credits may be offered in each of Business Education 10, 20, and 30 to a maximum of 30 credits. Business Education 10, 20, or 30 courses are created by selecting a number of modules from the eight main subject strands as well as from the OPTIONAL strand. Elective modules within the subject strands may only be selected if students have taken the core modules identified in the strands. Business Education 10, 20, and 30 courses are sequential.

MINI COURSES

As an alternative to using the modules in the OPTIONAL strand to enhance subject area courses, modules from the OPTIONAL strand may be grouped together to form 3-credit courses as follows:

Record Keeping 10	-	(1) Record Keeping 1 (2) Record Keeping 2 (3) Record Keeping 3
Business Calculation 20	-	(4) Business Calculation 1 (5) Business Calculation 2 (6) Business Calculation 3
Business Communication 20	-	(7) Business Communication: Development (8) Business Communication: Practice (9) Business Communication: Integration
Dicta Typing 20	-	(12) Dicta Typing 1 (13) Dicta Typing 2 (16) Business Simulation
Word Processing 30	-	(14) Word Processing 1 (15) Word Processing 2 (16) Business Simulation

ENHANCEMENT: Use of Optional Modules

A subject strand course may be enhanced by including a module or modules from the OPTIONAL strand that supports the objective for a particular course. Inclusion of modules from subject strands other than OPTIONAL is not permissible. Not more than one OPTIONAL module may be included at each grade level in a 3-credit course, and not more than two optional modules may be included at each grade level in a 5-credit course. The business research and business simulation modules may, however, be used once in each subject strand provided that the research or simulation topic is not duplicated. The OPTIONAL strand modules are:

1. Record Keeping 1
2. Record Keeping 2
3. Record Keeping 3
4. Business Calculation 1
5. Business Calculation 2
6. Business Calculation 3
7. Business Communication: Development
8. Business Communication: Practice
9. Business Communication: Integration
10. Business Research Project
11. Goal Setting and Career Development
12. Dicta Typing 1
13. Dicta Typing 2
14. Word Processing 1
15. Word Processing 2
16. Business Simulation

TEACHER PLANNING AND THE MODULAR STRUCTURE

Suggested Steps

1. For each COURSE:

1.1 Identify the modules using the curriculum guide, planning worksheets and teacher's manual (if available). Selection of the modules may already be determined by the school or jurisdiction. Careful planning in the choice of modules is essential to eliminate repetition of modules within a student's program.

Note: Select one module for each credit; that is, choose three modules for a 3-credit course and five modules for a 5-credit course.

1.2 Plan your year so that you know the approximate dates modules will begin and end. Note that modules or the topics within a module do not necessarily have to be taught sequentially. The objectives for the modules designated within a course can be blended together (integrated). Some of the content is sequential, some is not. The teacher must determine the sequence in which the topics will be taught within each course.

To plan your program, use a school calendar to indicate holidays, professional development days, special school activity days and scheduled examinations. You may wish to give this calendar to students at the beginning of the year along with a course outline.

REMEMBER: A time plan often needs to be modified, but a good initial plan gives you and your classes a sense of direction and confidence. Always leave a few days of flexibility in each module. Unexpected class interruptions, or slower than expected progress, may affect the time needed for completion.

1.3 Prepare a course outline that describes the course and distribute it to students, administrators, counsellors and parents. This outline can be a general description of each module and should include the objectives listed in the curriculum guide.

1.4 Outline the student evaluation criteria by showing students the relationship of final grades to course objectives. Include appeal procedures.

2. For each MODULE:

2.1 Identify and locate basic, recommended and supplementary resources.

2.2 Plan how you intend to cover each TOPIC listed in the curriculum guide. The expected depth and scope for each TOPIC can be recognized by the LEARNING TASKS.

2.3 Arrange for speakers, audio visual aids, field trips.

2.4 Determine method of evaluation. The instructional time allotted to the TOPIC should be the basis for the weighting of evaluation. For example, if 1/4 of the time is spent on letters, 1/4 on tables and 1/2 on reports, the evaluation could be:

Letters - 25%		Letters - 20%
Tables - 25%	or	Tables - 20%
Reports - 50%		Reports - 40%
		Final Examination - 20%

3. For each TOPIC:

3.1 Determine whether students are expected to meet standards at the:

3.1.1 awareness level,
3.1.2 application level, and/or
3.1.3 mastery level.

3.2 Relate TOPICS to basic resources and determine assignments (prepare materials) that reflect the depth of knowledge expected.

3.3 Prepare lesson plans for your class periods.

STUDENT MOBILITY

All high school programs are affected by students entering classes during the school term. Business education teachers may find it desirable to design materials whereby a student can complete a module in a flexible or individualized manner.

The teacher will have to assess what the student has covered and make an appropriate placement.

MAINTAINING SCHOOL RECORDS

It is recommended that the school or jurisdiction maintain a record of the specific modules that have been included in each course. Such records will reduce the chance of repetition of modules if there are personnel changes and provide for consistency in program and student assessment. Appendices 1 and 2 may be used for recording modules as well as providing counsellors and administrators with useful information for scheduling and budget decisions.

TEACHING KEYBOARDING

1. Introduction

The keyboard is the major input device for microcomputers. As access to computer work stations increases, so does the value of developing efficient keyboarding skills. Keyboarding skills can be developed on typewriters and microcomputers. There is some need to review technique requirements and speed and accuracy expectations.

2. Typewriting in Junior High School

This 75-hour complementary course is designed to develop basic typewriting techniques which may be used for computer input, personal typing or as an introduction to senior high school typewriting courses. To optimize the value of the credit time, it is preferable to offer the course:

1. on a daily basis.

2. with an instructor skilled in developing and reinforcing touch typewriting skills.

3. on electric or electronic equipment.

4. with current learning resources; i.e., texts, student workbooks and computer software.

Coordination with senior high school typewriting programs is highly recommended to assist in a smooth transition for those students continuing in the program.

Mastery of the alphabetic and numeric keyboards is the objective of the 75-hour junior high school typewriting program which can be offered at the Grade 7, 8, or 9 level.

3. Keyboarding and Computer Courses in Senior High School

Modules 1 and 2 of Typewriting 10 have the same objective.

Schools are encouraged to integrate instruction in keyboarding into computer courses if students have not already had the opportunity to develop touch typewriting skills. For example, the data entry module in computer processing reinforces or builds keyboarding skills.

PART III:

OVERVIEW OF SUBJECT STRANDS

ACCOUNTING 10-20-30

Introduction

The accounting program provides an opportunity for all students to develop an understanding of basic accounting concepts and procedures. At the introductory level the students will learn the mechanics of the accounting cycle. Advanced study will enhance the basic skills and provide competencies that prepare the student for employment or further study beyond high school. Students will study the accounting cycle of a small business and expand their knowledge to include specialized areas within accounting.

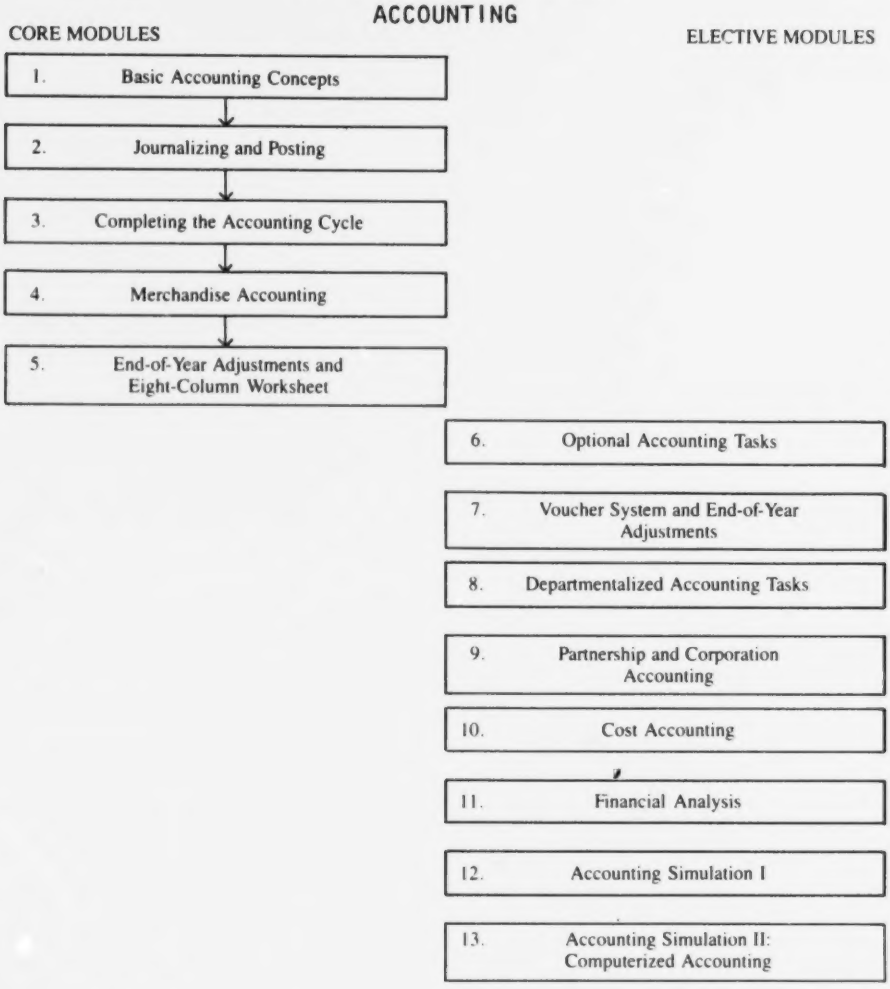
Computers reflect present practices within accounting offices, enhance employment opportunities, and allow students more opportunity to analyze and interpret financial documents. As a result, the use of computers is recommended in the accounting strand.

Objectives

The student will:

1. Learn how the financial position of an individual business is determined.
2. Accurately journalize the various daily transactions.
3. Understand the importance of maintaining accurate accounting records.
4. Be able to use relevant terminology appropriately.
5. Complete financial documents accurately and neatly.
6. Use the computer in performing accounting functions.
7. Develop decision-making skills in the preparation, analysis, and interpretation of financial statements.
8. Develop a basic understanding of accounting procedures applicable to single proprietorships, partnerships and corporations.
9. Demonstrate a knowledge of acceptable cost accounting procedures.
10. Investigate careers in the field of accounting.

FLOWCHART OF MODULES :
ACCOUNTING


CORE MODULES
ELECTIVE MODULES
1. Basic Accounting Concepts
2. Journalizing and Posting
3. Completing the Accounting Cycle
4. Merchandise Accounting
5. End-of-Year Adjustments and Eight-Column Worksheet
6. Optional Accounting Tasks
7. Voucher System and End-of-Year Adjustments
8. Departmentalized Accounting Tasks
9. Partnership and Corporation Accounting
10. Cost Accounting
11. Financial Analysis
12. Accounting Simulation I
13. Accounting Simulation II: Computerized Accounting

Notes on Course Implementation

The accounting subject strand is composed of 13 modules, 5 of which are core and 8 are elective. The core modules are prerequisite to the elective modules. Modules 1 to 5 are sequential. The elective modules are not sequential.

Courses of 3 or 5 credits may be developed in Accounting 10 and 20 by selecting 3 or 5 modules.

Accounting 30 may only be offered for 5 credits. Students must have access to computers and suitable software, particularly in the 20- or 30-level courses. Printing calculators should also be available.

Refer to individual modules for further information regarding equipment requirement or prerequisites.

The integration of the work study component of the work experience (cooperative education) program is encouraged.

COURSE PLANNING WORKSHEET
FOR
ACCOUNTING 10 - 20 - 30

Maximum Credits: 13

Course Sequence: Accounting 10 (3) (5), Accounting 20 (3) (5), Accounting 30 (5)

	MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
CORE	1. Basic Accounting Concepts	10	Nil	Recommend access to electronic calculators and/or computer.
	2. Journalizing and Posting	10	AC Module 1	
	3. Completing the Accounting Cycle	10	AC Module 2	
	4. Merchandise Accounting	10/20	AC Module 3	
	5. End-of-Year Adjustments and 8-Column Worksheets	10/20	AC Module 4	
ELECTIVE	6. Optional Accounting Tasks	20	AC Module 5	Recommend access to computer and general ledger software.
	7. Voucher System and End-of-Year Adjustments	20/30		
	8. Departmentalized Accounting Tasks	20/30		
	9. Partnership and Corporation Accounting	20/30		
	10. Cost Accounting	30		
	11. Financial Analysis	30		
	12. Accounting Simulation I	20/30		
	13. Accounting Simulation II: Computerized Accounting	30		Requires access to computers with suitable software support.

BASIC BUSINESS 20-30

Introduction

The basic business program at the high school level is designed to help the student develop sound personal skills in financial planning, decision-making, and goal setting.

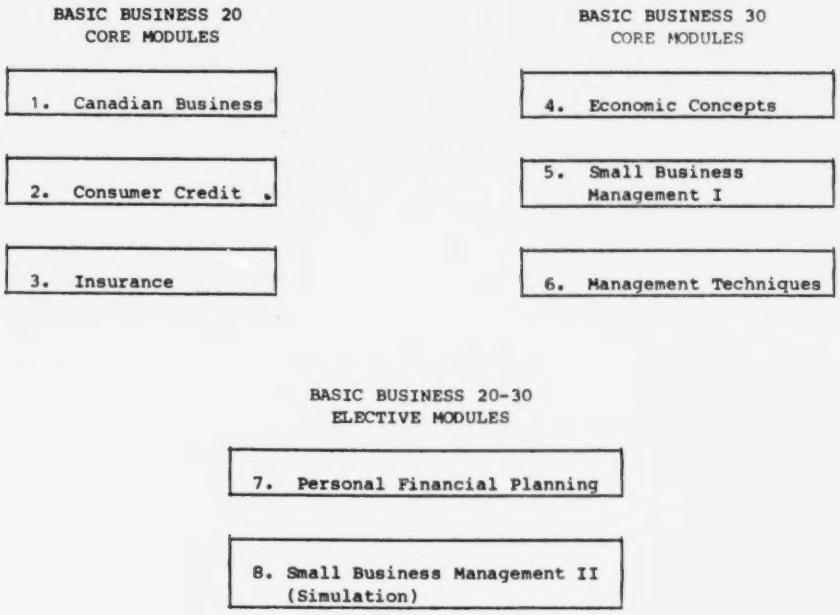
Students will be aware of the wide range of support and restrictions that influence management decisions and will apply these skills to situations appropriate to personal career planning.

Objectives

The student will:

1. Develop a knowledge and understanding of the structure and principles that control business.
2. Investigate the interrelationship of business systems within the local, national, and international scene.
3. Develop an understanding of the fundamental principles that affect consumer choice.
4. Examine the influence government has on consumers and business.
5. Develop an understanding of the basic economic concepts and their relationship to the business environment and the consumer citizen.
6. Develop an understanding of the fundamental principles and factors related to success in small business.
7. Develop understanding and skill in successful personal financial management.
8. Investigate and evaluate the sources of consumer credit.
9. Examine management techniques.
10. Investigate and analyze the various types of insurance.

FLOWCHART OF MODULES: BASIC BUSINESS



Notes On Course Implementation

The basic business subject strand is composed of 8 modules. Basic Business 20 may be offered for 3 or 5 credits. Basic Business 30 may also be offered for 3 or 5 credits.

Three modules are designated as core for the 20 level and three modules are designated as core at the 30 level. Modules are not sequential, except for module 5 which is prerequisite to module 8.

Additional modules to form 5-credit courses may be selected from the two elective modules or from the Optional strand. Modules 1, 2, and 7 are designed to expand consumer awareness within the business context. Modules 3, 4, 5, 6, and 8 are designed to build basic business management skills.

If the objective of Basic Business 20 (3 credits) in your school is to build consumer awareness rather than provide a general overview of business, the CORE modules may be redefined as follows: Module 7 "Personal Financial Planning" may replace Module 3 "Insurance". This arrangement has been approved for a three-year period. NOTE: The consumer-related content in Basic Business 20-30 is expected to be modified when the High School Career Life Management Program is implemented.

Optional modules which are recommended for use within the course configurations are:

Module No. 5. Business Calculation 2
8. Business Communication - Practice
9. Business Communication - Integration
10. Business Research Project
11. Goal Setting and Career Development
16. Business Simulation

Integration of work study and work experience (cooperative education) programs is encouraged.

Access to microcomputers and suitable software is recommended. Refer to individual modules for further information regarding equipment requirements and prerequisites.

COURSE PLANNING WORKSHEET
FOR
BASIC BUSINESS 20 - 30

Maximum Credits: 10

Course Sequence: Basic Business 20 (3) (5)

Basic Business 30 (3) (5)

		MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
BB 20	CORE	1. Canadian Business	20	Nil	
		2. Consumer Credit	20		
		3. Insurance	20		
BB 30	CORE	4. Economic Concepts	30	Nil	
		5. Small Business Management I	30		
		6. Management Techniques	30		
	ELECTIVE	7. Personal Financial Planning	20/30	Nil	
		8. Small Business Management II (Simulation)	20/30	5, 6, 8 (recommended)	

A maximum of one optional module may be included in a 3-credit course, two modules in a 5-credit course.

	OPTIONAL	5. Business Calculation 2	10/20		Requires access to electronic calculators.
		8. Business Communication: Practice	20/30		
		9. Business Communication: Integration	20/30		Requires access to dictation equipment.
		10. Business Research Project	10/20/30		
		11. Goal Setting and Career Development	10/20/30		
		16. Business Simulation	10/20/30		

COMPUTER PROCESSING 10-20-30

Introduction

Computer processing is designed to provide all students with an opportunity to study the impact of the computer on the individual and society. Programming and software manipulation should provide the student with an opportunity to direct personally the power of the computer to solve simple to complex problems.

The skills and knowledge developed will be applicable to all disciplines. Students have the opportunity to develop basic skills for the personal use of the computer, skills that support their career plans, or skills that provide suitable background for further post-secondary study.

Objectives

The student will:

1. Examine the fundamental terminology, equipment procedures, and concepts used in a computerized environment.

2. Develop the ability to use the computer to help solve problems, manipulate data, and draw inferences from data.

3. Examine the potential of computers in personal and professional activities.

4. Become adept at the manipulation of hardware and software as preparation for career or personal use.

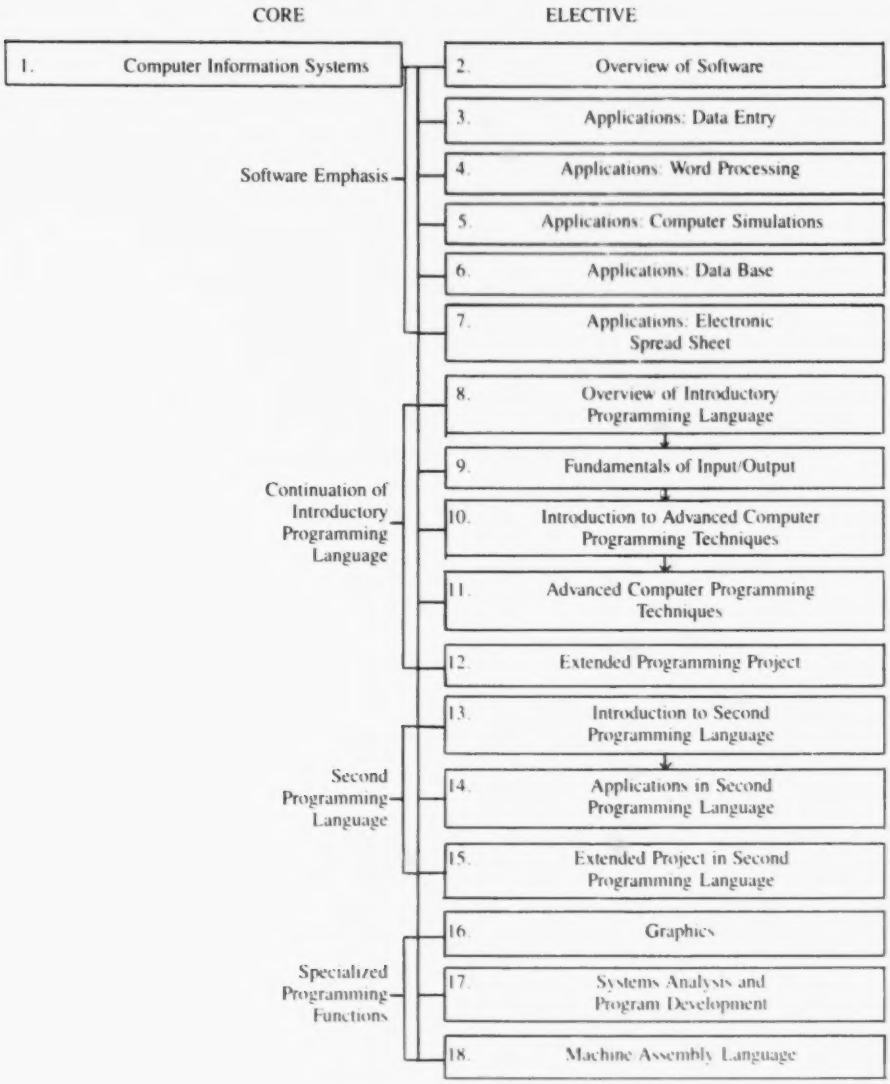
5. Develop expertise in efficient programming techniques and program design.

6. Become aware of the potential for computer-based communications.

7. Recognize the impact of computers on productivity and career paths.

FLOWCHART OF MODULES

COMPUTER PROCESSING


CORE
ELECTIVE
1. Computer Information Systems
2. Overview of Software
3. Applications: Data Entry
Software Emphasis
4. Applications: Word Processing
5. Applications: Computer Simulations
6. Applications: Data Base
7. Applications: Electronic Spread Sheet
8. Overview of Introductory Programming Language
9. Fundamentals of Input/Output
Continuation of Introductory Programming Language
10. Introduction to Advanced Computer Programming Techniques
11. Advanced Computer Programming Techniques
12. Extended Programming Project
13. Introduction to Second Programming Language
Second Programming Language
14. Applications in Second Programming Language
15. Extended Project in Second Programming Language
16. Graphics
Specialized Programming Functions
17. Systems Analysis and Program Development
18. Machine/Assembly Language

Notes on Course Implementation

> NOTE: Although Computer Processing 10-20-30 courses are in the business education program, the core and elective components form a foundation of basic computer skills and understandings that may be extended into other subject areas.
>
> Many of the applications included in the program complement topics in other subject areas such as: graphics (mathematics), simulations (science), and word processing (language arts).

Computer Processing has 18 modules, 1 core and 17 elective. Courses of 3 or 5 credits (3 or 5 modules) may be developed at the 10, 20 and 30 levels to a maximum of 15 credits. Courses will need to be scheduled in an appropriately equipped computer lab. The recommended minimum ratio is two students to one machine.

Modules 2-7 deal with software applications. Module 8 may be used to review introductory programming concepts introduced in other courses. Programming is continued in Modules 9-12, and second language programming in Modules 13-15. Modules 16-18 introduce specialized aspects of computer processing.

Modules from the Optional strand may be integrated into computer processing if not used previously within a student's program. It is recommended that a choice be made from the following Optional modules:

Module No.	10.	Business Research Project
	11.	Goal Setting and Career Development
	14.	Word Processing 1
	16.	Business Simulation

Some modules may have prerequisites and equipment requirements. Computer Literacy 10 may be used as an alternative prerequisite to Computer Processing 20. Refer to individual modules for further information.

COURSE PLANNING WORKSHEET
FOR
COMPUTER PROCESSING 10 - 20 - 30

Maximum Credits: 15

Course Sequence: Computer Processing 10 (3) (5), 20 (3) (5), 30 (3) (5)
(Computer Literacy 10 may also serve as a prerequisite.)

		MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
CORE		1. Computer Information Systems	10/20	Nil	Recommend access to suitable hardware/software support.
ELECTIVE	SOFTWARE EMPHASIS	2. Overview of Software	10/20/30	CP Module 1	Requires access to commercially prepared software packages.
		3. Applications: Data Entry	10/20/30	CP Module 1	Requires access to number pad and suitable software such as data entry, general ledger, electronic spread sheet.
		4. Applications: Word Processing	10/20/30	CP Module 1 (recommended)	Requires suitable word processing software. Recommend additional printer support.
		5. Applications: Computer Simulations	10/20/30	CP Module 1	Requires suitable software and hardware support.
		6. Applications: Data Base	10/20/30		Requires access to data base and/or related software. Recommend access to modem.
		7. Applications: Electronic Spread Sheet	10/20/30		Requires access to electronic spread sheet software.
	PROGRAMMING (SECOND LANG.)	8. Overview of Introductory Programming Language	10/20	CP Module 1	Requires suitable hardware support.
		9. Fundamentals of Input/ Output	10/20/30	CP Module 1	
		10. Introduction to Advanced Computer Programming Techniques	10/20/30	CP Module 1 CP Module 9	
		11. Advanced Computer Programming Techniques	10/20/30	CP Module 1 CP Module 10	
		12. Extended Programming Project	10/20/30	CP Module 1 CP Module 8	

		MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
ELECTIVE	PROGRAMMING (SECOND LANG.)	13. Introduction to Second Programming Language	20/30	CP Module 1	Requires suitable hardware support and facility to handle the designated programming language.
		14. Applications in Second Programming Language	20/30	CP Module 1 CP Module 13	
		15. Extended Project in Second Programming Language	20/30	CP Module 1 CP Module 14	
	SPEC. PROG. FUNCTIONS	16. Graphics	10/20/30	CP Module 1	Requires suitable hardware support. Recommend access to graphics tablet, suitable printer support.
		17. Systems Analysis and Program Development	20/30	CP Module 1	
		18. Machine/Assembly Language	10/20/30	CP Module 1	Requires suitable hardware support.

A maximum of one optional module may be included in a 3-credit course, or two modules in a 5-credit course.

OPTIONAL	10. Business Research Project	10/20/30		
	11. Goal Setting and Career Development	10/20/30		
	14. Word Processing 1	10/20/30		
	16. Business Simulation	10/20/30		

LAW 20-30

Introduction

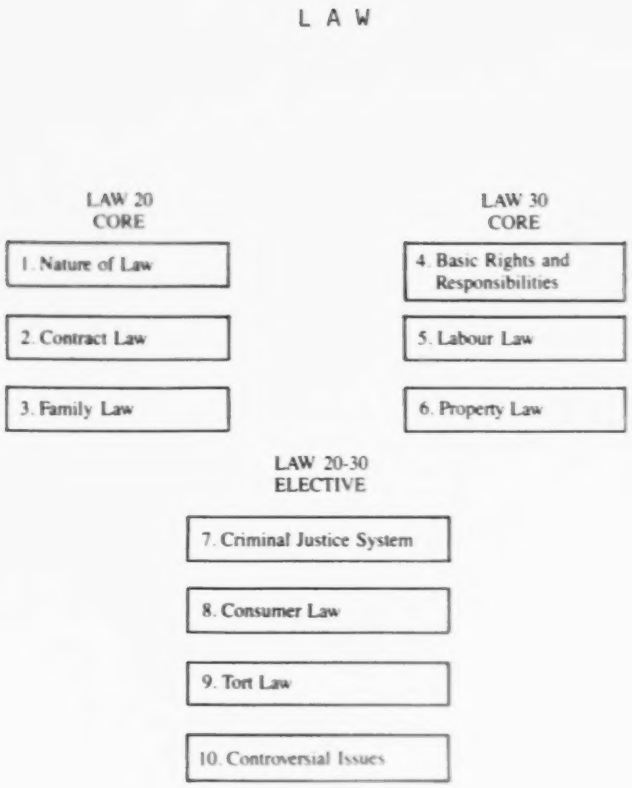
Law 20-30 is designed to promote a student's appreciation and understanding of the legal system and relevant laws which regulate personal interactions and business-related activities. Through analysis of actual cases, the student will develop analytical reasoning skills and an awareness of the legal issues and legal procedures with which a citizen and employee must deal.

Objectives

The student will:

1. Develop a knowledge and understanding of the growth of our legal system and the courts which administer its principles.
2. Develop an understanding of the fundamental principles, terminology and structure of civil and criminal law.
3. Recognize the rights and responsibilities of the individual and the relationship that these have on society.
4. Develop tolerance and maturity in the critical analysis of our legal system.
5. Identify and use opportunities to apply logical thinking and good judgement in applying legal principles to business and personal problems.
6. Identify the rights and responsibilities of the parties to various types of contracts.
7. Investigate and apply the laws governing common consumer transactions.
8. Examine laws relating to employment and the bargaining process.
9. Study the laws related to the family unit.
10. Study the laws related to the rights and responsibilities of renting or owning real property.

FLOWCHART OF MODULES



Notes on Course Implementation

The law subject strand is composed of 10 modules. Law 20 may be offered for 3 or 5 credits. Law 30 may also be offered for 3 or 5 credits.

Three modules are designated core for the 20 level, three are designated as core at the 30 level. Additional modules to form 5-credit courses may be selected from the elective law modules, or from the optional strand.

Modules from the optional strand which are recommended for integration into the law program are:

Module No. 10. Business Research Project
16. Business Simulation

Refer to individual modules for further information regarding equipment requirements or prerequisites.

COURSE PLANNING WORKSHEET
FOR
LAW 20 - 30

Maximum Credits: 10

Course Sequence: Law 20 (3) (5)

Law 30 (3) (5)

		MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
LAW 20	CORE	1. Nature of Law and the Civil Law System	20	Nil	
		2. Contract Law	20		
		3. Family Law	20		
LAW 30	CORE	4. Basic Rights and Responsibilities	30	Nil	
		5. Labour Law	30		
		6. Property Law	30		
	ELECTIVE	7. Criminal Justice System	20/30	Nil	
		8. Consumer Law	20/30		
		9. Tort Law	20/30		
		10. Controversial Issues	20/30		

A maximum of one optional module may be included in a 3-credit course, or two modules in a 5-credit course.

	OPTIONAL	10. Business Research Project	10/20/30		
		16. Business Simulation	10/20/30		

MARKETING 20-30

Introduction

Individuals in our society are surrounded by a complicated marketplace that uses high technology and well-trained personnel to satisfy the wants and needs of consumers. Marketing at the high school level provides an opportunity for students to develop knowledge and skills relating to the people, products, and procedures which make up the world of marketing.

Objectives

The student will:

1. Introduce the marketing process and study the various marketing activities found within the Canadian economy.

2. Acquire the techniques of marketing research and apply these skills and techniques to decision-making in the marketplace.

3. Examine and evaluate the factors related to transportation and distribution of goods and services in Canada and relate these influences to the organization of the retail outlet.

4. Examine the role of profit and evaluate a wide variety of pricing policies, strategies and techniques used in cash control in the marketplace.

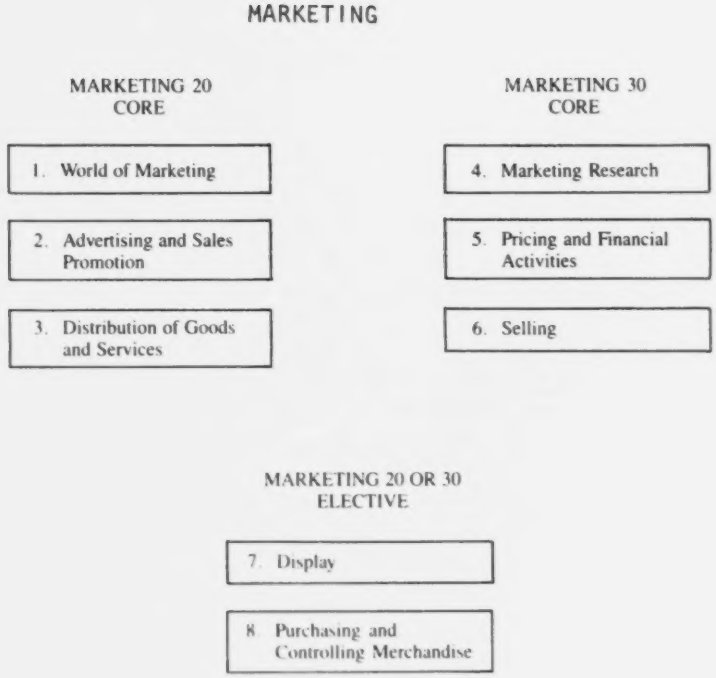
5. Investigate and analyze the procedure involved in the purchase and inventory of goods.

6. Examine the purposes and types of advertising, media alternatives, and the skills involved in the creation of an effective campaign.

7. Study the role of selling in the marketing process and analyze and apply a variety of sales techniques.

8. Learn and apply the techniques of proper visual display.

FLOWCHART OF MODULES



Notes on Course Implementation

The marketing subject strand is composed of 8 modules. Marketing 20 may be offered for 3 or 5 credits. Marketing 30 may also be offered for 3 or 5 credits.

Three modules are designated as core at the 20 level and three are designated as core at the 30 level. The modules are not sequential. Additional modules to form a 5-credit course may be selected from the elective modules or from the optional strand.

Modules from the optional strand which are recommended for integration into the marketing program are:

Module No. 6. Business Calculations 3
9. Business Communication – Integration
10. Business Research Project
11. Goal Setting and Career Development

It is recommended that the work study component of work experience be integrated into the marketing program. Also, the work experience program could be planned in conjunction with Marketing 20 or 30.

Access to microcomputers and suitable software is recommended. A lab setting would provide an opportunity for students to apply the skills and concepts in a realistic setting. Refer to individual modules for further information regarding equipment requirements and prerequisites.

COURSE PLANNING WORKSHEET
FOR
MARKETING 20 - 30

Maximum Credits: 10

Course Sequence: Marketing 20 (3) (5)

Marketing 30 (3) (5)

		MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
MARKETING 20	CORE	1. World of Marketing	20	Nil	Recommend access to a marketing lab.
		2. Advertising and Sales Promotion	20		
		3. Distribution of Goods and Services	20		
MARKETING 30	CORE	4. Marketing Research	30	Nil	Recommend access to a marketing lab and micro-computer.
		5. Pricing and Financial Activities	30		
		6. Selling	30		
	ELECTIVE	7. Display	20/30	Nil	Recommend access to a marketing lab, micro-computer and inventory software.
		8. Purchasing and Controlling Merchandise	20/30		

Note: A maximum of one optional module may be included in a 3-credit course, or two modules in a 5-credit course.

OPTIONAL	6. Business Calculation 3	10/20	Nil	Requires electronic calculators.
	9. Business Communication - Integration	20/30		Requires access to dictation equipment.
	10. Business Research Project	10/20/30		
	11. Goal Setting and Career Development	10/20/30		

NOTE: Recommend articulation with Work Experience program(s).

OFFICE PROCEDURES 20-30

Introduction

Office procedures provides students with the opportunity to study the structure, procedures, and technology common to modern Canadian business offices. A major focus of the course is the integration of skills, procedures, and attitudes within an environment that simulates a modern office. The Office Procedures 20-30 program encourages the development of vocational-level competencies suitable for students interested in clerical or secretarial occupations.

Objectives

The student will:

1. Examine the organization, functions, and procedures common to a business office.

2. Examine the various career paths, benefits, and responsibilities of the personnel within the business office.

3. Become familiar with the various methods of communication used in a modern business office.

4. Apply the current procedures for the storage, retention, reproduction, and retrieval of recorded information.

5. Examine the routines related to the processing of words and data through the study of procedures, equipment, and personnel.

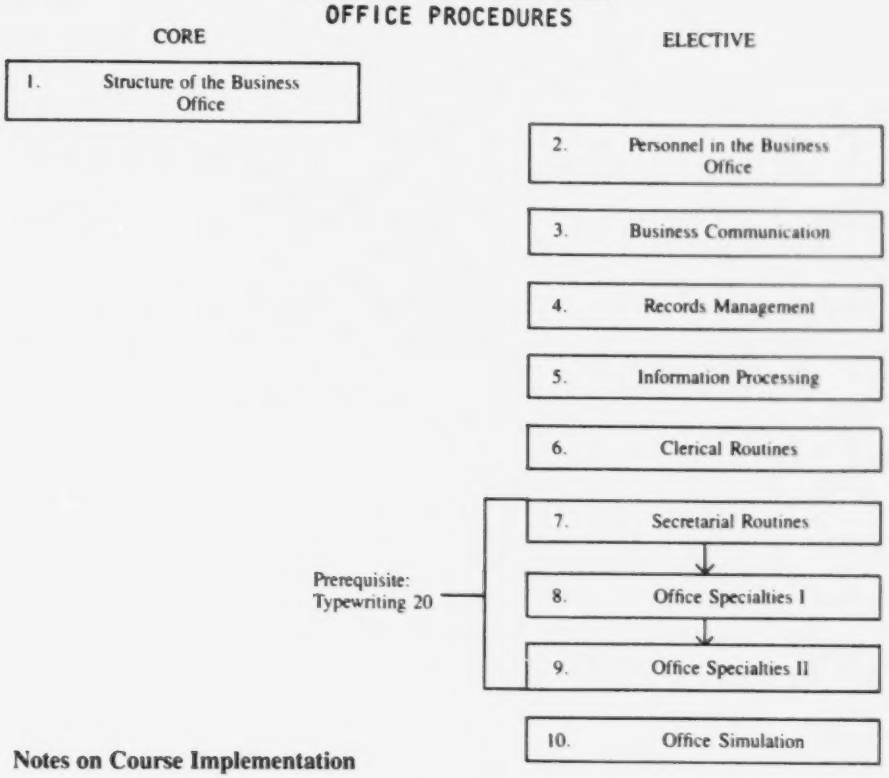
6. Demonstrate the clerical routines that support the efficient handling of goods and services in the modern office.

7. Demonstrate efficient secretarial skills and procedures that support the activities of management.

8. Utilize the terminology, documentation, and procedures prevalent in a selected secretarial specialization.

9. Integrate the basic skills, specialized knowledge, and human relations skills developed throughout the business program, within a simulated or in an actual business environment.

FLOWCHART OF MODULES
OFFICE PROCEDURES



Notes on Course Implementation

The office procedures subject strand identifies 10 modules, 1 core and 9 elective. The core module is prerequisite to the elective modules. The elective modules are not sequential, although modules 7, 8 and 9 are recommended for 30-level courses.

Modules 1 to 5 are particularly suitable for a program designed for students interested in general (clerical) office occupations which do not emphasize secretarial routines. Module 10 could be included to support either clerical or secretarial-oriented courses.

Modules 7, 8 and 9 require Typewriting 20 as a prerequisite and should be taught in a classroom equipped with electric/electronic typewriters or machines with text editing capability. Courses offered at the 30 level should expand basic skills and concepts and require students to demonstrate a skill level that reflects business standards.

Courses may be developed for Office Procedures 20 and 30 in modular groups of 3 or 5 to a maximum of 10 credits. Modules from the "Optional" column which are recommended for use within Office Procedures 20 and/or 30 are:

Module No. 8. Business Communication – Practice
9. Business Communication – Integration
11. Goal Setting and Career Development
12. Dicta Typing 1
13. Dicta Typing 2
14. Word Processing 1
15. Word Processing 2
16. Business Simulation

Refer to individual modules for further information regarding equipment requirements or prerequisites.

Integration of Work

It is recommended that the work study component of work experience be integrated into the office procedures program. Also, the work experience program could be planned in conjunction with Office Procedures 30.

COURSE PLANNING WORKSHEET
FOR
OFFICE PROCEDURES 20 - 30

Maximum Credits: 10

Course Sequence: Office Procedures 20 (3) (5), Office Procedures 30 (3) (5)

Typewriting 20 is also a prerequisite to Office Procedures 30.

	MODULE	COURSE LEVEL	PREREQUISITE MODULES	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
CORE	1. Structure of the Business Office	20	Nil	
ELECTIVE	2. Personnel in the Business Office	20/30	OP Module 1	
	3. Business Communication	20/30	OP Module 1 TY 10 (recommended)	
	4. Records Management	20/30	OP Module 1	Access to model filing system.
	5. Information Processing	20/30	OP Module 1 TY 10 Module 5 (recommended)	Requires access to office procedures lab. Recommend access to data and/or word processing equipment.
	6. Clerical Routines	20	OP Module 1	Access to electronic calculators.
	7. Secretarial Routines	30	OP Module 1 TY Module 8	Requires office procedures lab. Access to text-editing equipment.
	8. Office Specialties I	20/30	OP Module 1 OP Module 7 OP Module 8 OP Mod. 3/7 (recommended)	
	9. Office Specialties II	30	OP Module 1/7 OP Module 3/7 (recommended)	Requires office procedures lab (preferably equipped as a model office).
	10. Office Simulation	20/30	OP Module 1	Recommend integration of work study program.

A maximum of one optional module may be included in a 3-credit course, or two modules in a 5-credit course.

	MODULE	COURSE LEVEL	PREREQUISITE MODULES	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
OPTIONAL	8. Business Communication: Practice	20/30		Requires access to dictation equipment.
	9. Business Communication: Integration	20/30		
	11. Goal Setting and Career Development	10/20/30		
	12. Dicta Typing 1	20/30	TY Module 1 to 5	Requires access to transcription equipment.
	13. Dicta Typing 2	20/30	Dicta Typing 1	Requires access to dictation/ transcription equipment.
	14. Word Processing 1	10/20/30	TY 10	Requires access to text-editing equipment.
	15. Word Processing 2	20/30	WP Module 1	
	16. Business Simulation	10/20/30		

SHORTHAND 20-30

Introduction

Shorthand provides students with an opportunity to become adept in an efficient notetaking system that is suitable for personal or career use. Students will learn to produce mailable transcripts from shorthand notes. The study of shorthand can improve basic English skills, expand vocabulary, and enhance employment possibilities. The alphabetic shorthand systems are considered suitable for the purposes of this program.

Objectives

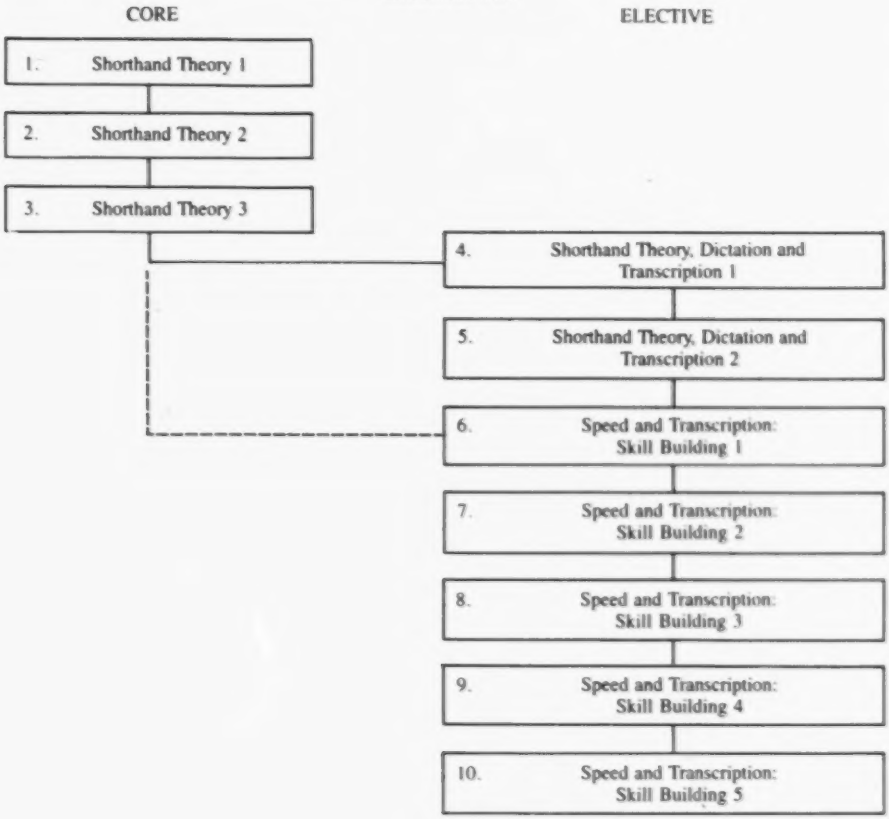
The student will:

1. Develop efficient notetaking skills suitable for personal and/or business use (Modules 1-3).

2. Develop the ability to take notes verbatim in shorthand and transcribe these notes into accurate copy at a level of efficiency that meets entry-level employment standards (Modules 4-10).

3. Expand and integrate skills and knowledge in areas of verbal and written communication.

FLOWCHART OF MODULES
SHORTHAND


CORE
ELECTIVE
1. Shorthand Theory 1
2. Shorthand Theory 2
3. Shorthand Theory 3
4. Shorthand Theory, Dictation and Transcription 1
5. Shorthand Theory, Dictation and Transcription 2
6. Speed and Transcription: Skill Building 1
7. Speed and Transcription: Skill Building 2
8. Speed and Transcription: Skill Building 3
9. Speed and Transcription: Skill Building 4
10. Speed and Transcription: Skill Building 5

Notes on Course Implementation

The shorthand subject strand identifies 10 modules, 3 of which are core and 7 of which are elective. Modules 1-3 are prerequisite to Module 4 and/or 6. Modules are sequential.

Courses of 3 or 5 credits may be developed in Shorthand 20 and 30 by selecting 3 or 5 modules from the shorthand subject strand. A maximum of 10 credits is available to each student.

Modules 1, 2 and 3 could emphasize notetaking skills which are suitable for all students. Although keyboarding skills would be an effective prerequisite skill, Modules 1, 2 and 3 do not require typewriting. Modules 4 to 10 expand the dictation and transcription skills to levels suitable for job entry.

Courses including Modules 4 to 10 must be offered in a typewriting lab, with access to transcription machines or a lab.

The modules from the optional column which are recommended for integration in Shorthand 20-30 are:

Module No. 7. Business Communication – Development
8. Business Communication – Practice
9. Business Communication – Integration
12. Dicta Typing 1
14. Word Processing 1
16. Business Simulation

Refer to individual modules for further information on equipment requirements or course prerequisites.

COURSE PLANNING WORKSHEET
FOR
SHORTHAND 20 - 30

Maximum Credits: 10

Course Sequence: Shorthand 20 (3) (5), Shorthand 30 (3) (5)

Typewriting 20 is also prerequisite to Shorthand 30.

	MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
CORE	1. Shorthand Theory 1	20	TY 10 recommended	Recommend access to typewriting or office procedures lab.
	2. Shorthand Theory 2	20	SH Module 1	
	3. Shorthand Theory 3	20	SH Module 2	
ELECTIVE	4. Shorthand Theory, Dictation and Transcription 1	20/30	SH Module 3	Requires access to typewriting or office procedures lab. Recommend access to dictation/transcription system.
	5. Shorthand Theory, Dictation and Transcription 2	20/30	TY Module 3 SH Module 4	
	6. Speed and Transcription: Skill Building 1	30	SH Module 3 TY Module 5	Requires access to typewriting or office procedures lab. Recommend access to dictation/transcription system. Recommend access to text-editing equipment.
	7. Speed and Transcription: Skill Building 2	30	SH Module 6 TY 20	
	8. Speed and Transcription: Skill Building 3	30	SH Module 7 TY 20	
	9. Speed and Transcription: Skill Building 4	30	SH Module 8 TY 20	
	10. Speed and Transcription: Skill Building 5	30	SH Module 9 TY 20	

A maximum of one optional module may be included in a 3-credit course, or two modules in a 5-credit course.

OPTIONAL	7. Business Communication: Development	10/20/30		
	8. Business Communication: Practice	20/30		Requires access to dictation equipment.
	9. Business Communication: Integration	20/30		
	12. Dicta Typing 1	20/30		
	14. Word Processing 1	20/30		
	16. Business Simulation	10/20/30		

TYPEWRITING 10-20-30

Introduction

Typewriting offers an opportunity for the student to develop the keyboarding and production skills that are valuable for personal use or vocational preparation. The introductory modules are structured to facilitate development of correct touch keyboarding techniques. These techniques are the foundation from which students build skills to produce efficiently a variety of transcripts in mailable form. Students expand their production skills by becoming efficient in the use of the equipment and building skill in editing and composition.

Objectives

The student will:

1. Assume good posture at the work station while demonstrating an ability to maintain correct finger control on the keyboard.

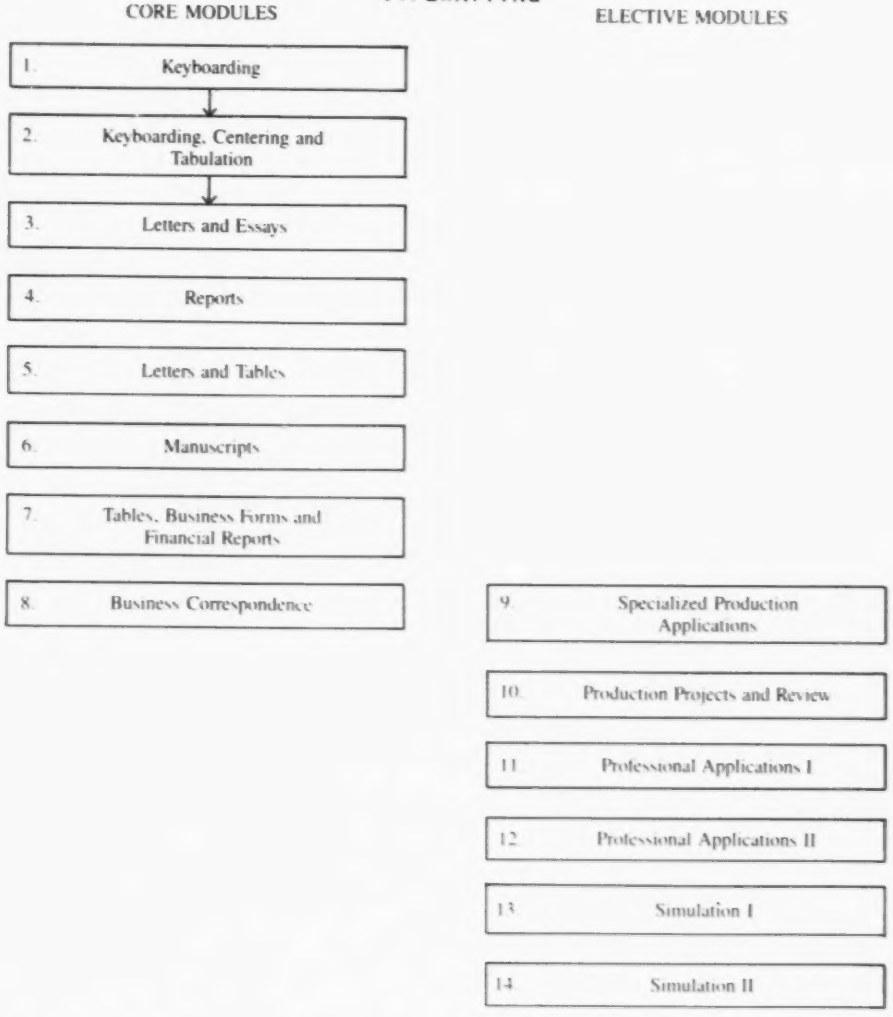
2. Select and use the various machine parts in an efficient and appropriate manner.

3. Compose and edit at the work station, demonstrating knowledge of correct language and production procedures.

4. Produce a variety of mailable copy from rough draft, unarranged and unedited source material.

5. Demonstrate efficient work habits and a commitment to quality production.

FLOWCHART OF MODULES
TYPEWRITING



Notes on Course Implementation

The typewriting subject strand consists of 14 modules: 8 core and 6 elective. The core modules are prerequisite to the elective modules. Modules 11, 12, 13 and 14 are recommended for the 30 level.

The first three modules are prerequisite to Modules 4 and 5. Modules 4 and 5 are not sequential, but are prerequisite to Modules 6, 7 and 8. Modules 1 to 8 are prerequisite to Modules 9 to 14.

Although all modules can be offered on machines with text-editing capability, it is recommended that students have access to text-editing equipment for Modules 10 to 14.

Typewriting 30 may only be offered for 5 credits (5 modules). A maximum of 15 credits is available to a student in Typewriting 10-20-30. Modules from the "Optional" column which are recommended for integration are:

Module No. 12. Dicta Typing 1
13. Dicta Typing 2
14. Word Processing 1
15. Word Processing 2
16. Business Simulation

Refer to individual modules for further information regarding equipment and/or prerequisites.

COURSE PLANNING WORKSHEET
FOR
TYPEWRITING 10 - 20 - 30

Maximum Credits: 15

Course Sequence: Typewriting 10 (3) (5), Typewriting 20 (3) (5), Typewriting 30 (5)

	MODULE	COURSE LEVEL	PREREQUISITE MODULES	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
CORE	1. Keyboarding	10		Requires access to typewriting lab.
	2. Keyboarding, Centering and Tabulation	10	TY Module 1	
	3. Letters and Essays	10	TY Module 1	
	4. Reports	10/20	TY Module 3	
	5. Letters and Tables	10/20		
	6. Manuscripts	20	TY Module 1 to 5	
	7. Tables, Business Forms and Financial Reports	20		
	8. Business Correspondence	20		
ELECTIVE	9. Specialized Production Applications	20/30	TY Module 1 to 8	Access to text-editing facility and necessary printer support.
	10. Production Projects and Review	20/30		
	11. Professional Applications I	30		
	12. Professional Applications II	30		
	13. Simulation I	30		
	14. Simulation II	30		

Note: A maximum of one optional module may be included in a 3-credit course, or two modules in a 5-credit course.

OPTIONAL	12. Dicta Typing 1	20/30	TY 10	Requires access to transcription equipment.
	13. Dicta Typing 2	20/30	Dicta Typing 1	Requires access to dictation/ transcription equipment.
	14. Word Processing 1	20/30	TY 20	Requires text-editing equipment.
	15. Word Processing 2	20/30	WP 1	
	16. Business Simulation	10/20/30		

BUSINESS EDUCATION 10-20-30
MINI COURSES
OPTIONAL MODULES

Introduction to Business Education 10-20-30

Business Education 10, 20, and 30 are courses that allow schools vertical and lateral flexibility in module selection. These courses may be designed to address the unique needs of a specific group of students, or to meet the objectives of a particular school.

Business Education 10, 20, or 30 courses may be created by selecting one or more modules from the eight main subject strands as well as from the optional strand. Elective modules within the subject strands may only be selected if students have taken the core modules identified in that strand.

Introduction to Mini Courses

Five mini courses are available to schools. They are:

1. Record Keeping 10 (3 credits)
2. Business Calculation 20 (3 credits)
3. Business Communication 20 (3 credits)
4. Dicta Typing 20 (3 credits)
5. Word Processing 30 (3 credits)

Alternatively, mini course modules are available for enrichment or enhancement within the subject strands.

Refer to the curriculum guides or the planning worksheets available in this manual for further information.

Introduction to Optional Modules

The 16 optional modules may be used to enhance any one of the eight subject strands. One optional module may replace an elective module in a 3-credit course and one or two in a 5-credit course. The business simulation and business research project modules can be used more than once provided that content is not duplicated.

Objectives:

1. Business Education 10-20-30 provides flexibility for programming through the use of subject and optional strand modules.

2. Mini courses allow schools to combine three optional modules within a specific content or skill area to form 3-credit courses.

3. Optional strand modules allow schools to provide supplemental material to enhance subject area strand courses.

4. Business calculation and business communication modules develop effective communication and calculation skills suitable for personal and business-related activities.

5. Dicta typing and word processing modules expand knowledge of and skill in dealing with the procedures and technology common to a modern business office.

6. The business simulation module provides experience in situations that reflect the standards and environment of business.

7. Goal setting and career development modules explore various strategies for goal setting and develop plans for a career in the business world.

8. The business research project module recognizes the sources of information available to a student in the decision-making process, and increases the level of skill and knowledge through research in an area that is of personal interest or is relevant to the business program.

COURSE PLANNING WORKSHEET
FOR
BUSINESS EDUCATION 10 - 20 - 30

Maximum Credits: 30

Course Sequence:

BE 10 (3) (5) (10), BE 20 (3) (5) (10), BE 30 (3) (5) (10)

Constraints to Selection of Modules:

- Modules may be selected from any of the subject strands provided that:
  1. the core modules within a subject strand are completed or are part of the course in which an elective module is included.
  2. students have met prerequisite criteria for each module.
  3. the modules are included only at the grade levels recommended and in the courses recommended (see Course Planning Worksheets).
- Check curriculum guides for additional prerequisites when using modules listed in the Business Education 20 and 30 columns.

C = CORE E = ELECTIVE

STRAND	GRADE LEVEL AT WHICH MODULES MAY BE OFFERED		
	BUSINESS EDUCATION 10	BUSINESS EDUCATION 20	BUSINESS EDUCATION 30
Accounting	C1. Basic Accounting Concepts C2. Journalizing and Posting C3. Completing the Accounting Cycle C4. Merchandise Accounting C5. End-of-Year Adjustments and 8-Column Worksheets	C4. Merchandise Accounting C5. End-of-Year Adjustments and 8-Column Worksheets E6. Optional Accounting Tasks E7. Voucher System and End-of-Year Adjustments E8. Departmentalized Accounting Tasks E9. Partnership and Corporation Accounting E12. Accounting Simulation I	E7. Voucher System and End-of-Year Adjustments E8. Departmentalized Accounting Tasks E9. Partnership and Corporation Accounting E10. Cost Accounting E11. Financial Analysis E12. Accounting Simulation I E13. Accounting Simulation II: Computerized Accounting
Basic Business		C1. Canadian Business C2. Consumer Credit C3. Insurance E7. Personal Financial Planning E8. Small Business Management II (Simulation)	C4. Economic Concepts C5. Small Business Management I C6. Management Techniques E7. Personal Financial Planning E8. Small Business Management II (Simulation)

STRAND	GRADE LEVEL AT WHICH MODULES MAY BE OFFERED		
	BUSINESS EDUCATION 10	BUSINESS EDUCATION 20	BUSINESS EDUCATION 30
Computer Processing	C1. Computer Information Systems E2. Overview of Software E3. Applications: Data Entry E4. Applications: Word Processing E5. Applications: Computer Simulations E6. Applications: Data Base E7. Applications: Electronic Spread Sheet E8. Overview of Introductory Programming Language E9. Fundamentals of Input/Output E10. Introduction to Advanced Computer Programming Techniques E11. Advanced Computer Programming Techniques E12. Extended Programming Project E16. Graphics E18. Machine/Assembly Language	C1. Computer Information Systems E2. Overview of Software E3. Applications: Data Entry E4. Applications: Word Processing E5. Applications: Computer Simulations E6. Applications: Data Base E7. Applications: Electronic Spread Sheet E8. Overview of Introductory Programming Language E9. Fundamentals of Input/Output E10. Introduction to Advanced Computer Programming Techniques E11. Advanced Computer Programming Techniques E12. Extended Programming Project E13. Introduction to Second Programming Language E14. Applications in Second Programming Language E15. Extended Project in Second Programming Language E16. Graphics E17. Systems Analysis and Program Development E18. Machine/Assembly Language	E2. Overview of Software E3. Applications: Data Entry E4. Applications: Word Processing E5. Applications: Computer Simulations E6. Applications: Data Base E7. Applications: Electronic Spread Sheet E9. Fundamentals of Input/Output E10. Introduction to Advanced Computer Programming Techniques E11. Advanced Computer Programming Techniques E12. Extended Programming Project E13. Introduction to Second Programming Language E14. Applications in Second Programming Language E15. Extended Project in Second Programming Language E16. Graphics E17. Systems Analysis and Program Development E18. Machine/Assembly Language
Law		C1. Nature of Law and the Civil Law System C2. Contract Law C3. Family Law E7. Criminal Justice System E8. Consumer Law E9. Tort Law E10. Controversial Issues	C4. Basic Rights and Responsibilities C5. Labour Law C6. Property Law E7. Criminal Justice System E8. Consumer Law E9. Tort Law E10. Controversial Issues

STRAND	GRADE LEVEL AT WHICH MODULES MAY BE OFFERED		
	BUSINESS EDUCATION 10	BUSINESS EDUCATION 20	BUSINESS EDUCATION 30
Marketing		C1. World of Marketing C2. Advertising and Sales Promotion C3. Distribution of Goods and Services E7. Display E8. Purchasing & Controlling Merchandise	C4. Marketing Research C5. Pricing and Financial Activities C6. Selling E7. Display E8. Purchasing & Controlling Merchandise
Office Procedures		C1. Structure of the Business Office E2. Personnel in the Business Office E3. Business Communication E4. Records Management E5. Information Processing E6. Clerical Routines E8. Office Specialties I E10. Office Simulation	E2. Personnel in the Business Office E3. Business Communication E4. Records Management E5. Information Processing E7. Secretarial Routines E8. Office Specialties I E9. Office Specialties II E10. Office Simulation
Shorthand		C1. Shorthand Theory 1 C2. Shorthand Theory 2 C3. Shorthand Theory 3 E4. Shorthand Theory, Dictation & Transcription 1 E5. Shorthand Theory, Dictation & Transcription 2	E4. Shorthand Theory, Dictation & Transcription 1 E5. Shorthand Theory, Dictation & Transcription 2 E6. Speed & Transcription: Skill Building 1 E7. Speed & Transcription: Skill Building 2 E8. Speed & Transcription: Skill Building 3 E9. Speed & Transcription: Skill Building 4 E10. Speed & Transcription: Skill Building 5

STRAND	GRADE LEVEL AT WHICH MODULES MAY BE OFFERED		
	BUSINESS EDUCATION 10	BUSINESS EDUCATION 20	BUSINESS EDUCATION 30
Typewriting	C1. Keyboarding C2. Keyboarding, Centering and Tabulation C3. Letters and Essays C4. Reports C5. Letters & Tables	C4. Reports C5. Letters & Tables C6. Manuscripts C7. Tables, Business Forms & Financial Reports C8. Business Correspondence E9. Specialized Production Applications E10. Production Projects & Review	E9. Specialized Production Applications E10. Production Projects & Review E11. Professional Applications I E12. Professional Applications II E13. Simulation I E14. Simulation II
Optional	E1. Record Keeping 1 E2. Record Keeping 2 E3. Record Keeping 3 E4. Business Calculation 1 E5. Business Calculation 2 E6. Business Calculation 3 E7. Business Communication: Development E10. Business Research Project E11. Goal Setting and Career Development E16. Business Simulation	E4. Business Calculation 1 E5. Business Calculation 2 E6. Business Calculation 3 E7. Business Communication: Development E8. Business Communication: Practice E9. Business Communication: Integration E10. Business Research Project E11. Goal Setting and Career Development E12. Dicta Typing 1 E13. Dicta Typing 2 E14. Word Processing 1 E15. Word Processing 2 E16. Business Simulation	E7. Business Communication - Development E8. Business Communication - Practice E9. Business Communication - Integration E10. Business Research Project E11. Goal Setting and Career Development E12. Dicta Typing 1 E13. Dicta Typing 2 E14. Word Processing 1 E15. Word Processing 2 E16. Business Simulation

The following flowcharts show two examples of module selection for a Business Education 10-20-30 program:

EXAMPLE 1

BUSINESS EDUCATION 10-20-30
Horizontal Application of Grid

Secretarial Major

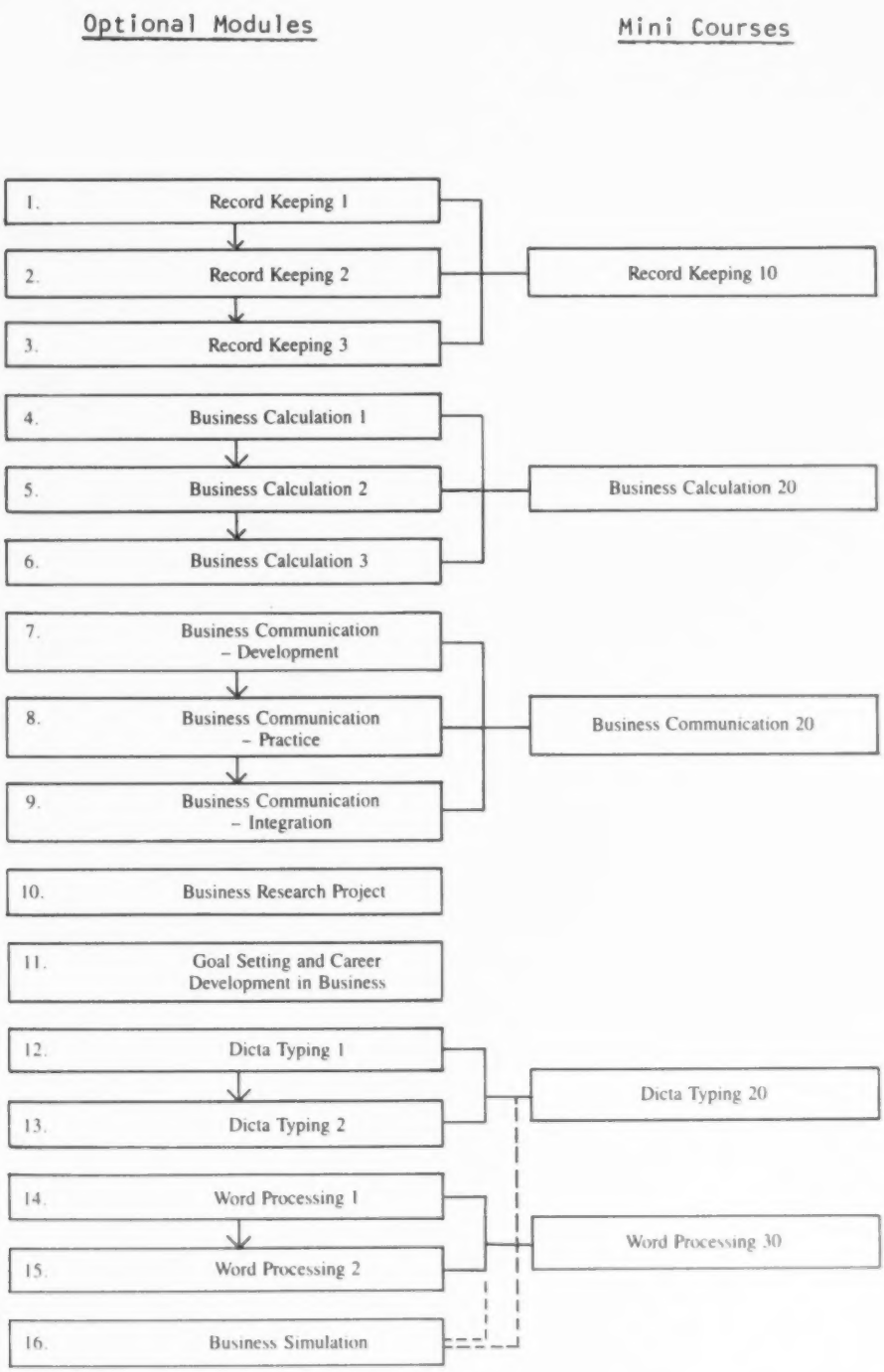
	Typewriting	Office Procedures	Computer Processing	Basic Business	Law	
10	Module 1 Module 2 Module 3	Module 1	Module 1 Module 2 Module 3	Module 1 Module 2	Module 1	10 cr.
20	Typewriting Module 4 Module 5 Module 6 Module 7	Office Procedures Module 2 Module 3 Module 4	Optional Module 4 Module 7 Module 12			10 cr.
30	Typewriting Module 8 Module 10 Module 11	Office Procedures Module 7 Module 8 Module 10	Optional Module 15 Module 16	Shorthand Module 1 Module 2		10 cr.

EXAMPLE 2

Business Management Major

	Typewriting	Basic Business	Accounting	Computer Processing		
10	Module 1 Module 2 Module 3	Module 1 Module 2	Module 1 Module 2 Module 3	Module 1 Module 2		10 cr.
20		Marketing Module 1 Module 3 Module 4	Accounting Module 4 Module 5 Module 6	Computer Processing Module 3 Module 4 Module 5	Law Module 1	10 cr.
30		Optional Module 4 Module 7	Accounting Module 7 Module 8 Module 9 Module 10	Computer Processing Module 7 Module 8 Module 9 Module 10		10 cr.

MINI COURSES/OPTIONAL MODULES



MINI COURSES

1. Record Keeping 10
2. Business Calculation 20
3. Business Communication 20
4. Dicta Typing 20
5. Word Processing 30

COURSE PLANNING WORKSHEET
FOR

Record Keeping 10

Maximum Credits: 3

Course Sequence: Record Keeping 10 (3)

Students may register in the Record Keeping 10 mini course if they have not taken one of the modules listed below as part of another business education course.

MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
1. Record Keeping 1	10		Access to electronic calculator.
2. Record Keeping 2	10		
3. Record Keeping 3	10		

NOTE: Since the content of Accounting 10 is similar to that of Record Keeping 10, students who have received credit for Accounting 10, 20 or 30 should not enrol in Record Keeping 10.

COURSE PLANNING WORKSHEET
FOR
Business Calculation 20

Maximum Credits: 3

Course Sequence: Business Calculation 20 (3)

Students may register in the Business Calculation 20 mini course if they have not taken one of the modules listed below as part of another business education course.

MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
4. Business Calculation 1	20		Requires access to electronic calculator.
5. Business Calculation 2	20		
6. Business Calculation 3	20		

COURSE PLANNING WORKSHEET
FOR
Business Communications 20

Maximum Credits: 3

Course Sequence: Business Communication 20 (3)

Students may register in the Business Communication 20 mini course if they have not taken one of the modules listed below as part of another business education course.

MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
7. Business Communication: Development	20		Access to dictation equipment.
8. Business Communication: Practice	20		Access to dictation/ transcription equipment.
9. Business Communication: Integration	20		

COURSE PLANNING WORKSHEET
FOR

Dicta Typing 20

Maximum Credits: 3

Course Sequence: Dicta Typing 20 (3)

Prerequisite: Typewriting 10

Students may register in the Dicta Typing 20 mini course if they have not taken one of the modules listed below as part of another business education course.

MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
12. Dicta Typing 1	20	TY Module 3	Requires access to transcription equipment.
13. Dicta Typing 2	20	Dicta Typing 1	Requires access to dictation/transcription equipment.
16. Business Simulation	20		

COURSE PLANNING WORKSHEET
FOR

Word Processing 30

Maximum Credits: 3

Course Sequence: Word Processing 30 (3)

Prerequisite: Typewriting 20

Students may register in the Word Processing 30 mini course if they have not taken one of the modules listed below as part of another business education course.

MODULE	COURSE LEVEL	MODULE PREREQUISITE	EQUIPMENT SUPPORT (REQUIRED/RECOMMENDED)
14. Word Processing 1	30		Requires access to text-editing equipment.
15. Word Processing 2	30	Word Processing 1	
16. Business Simulation	30		

PART IV:

STUDENT EVALUATION

Evaluation appraises the nature and worth of something. In teaching, it applies equally to what is taught (the program) and what is learned (the student experience). Here we focus on the evaluation of the student experience.

Some characteristics of good evaluation are:

1. Evaluation facilitates self-evaluation.

   One of the most important outcomes of evaluation occurs when the learner develops a healthy self-concept, acceptance, and respect for the uniqueness of each learner.

2. Evaluation is concerned with processes as well as outcomes.

   The form of evaluation should not frighten or discourage the student or it will not show the value of the learning.

3. Evaluation is a continuing process, not simply a test result.

   Arrangements should be in place during program planning, for the collection and recording of data about skill development, attitude change and cognition.

4. Evaluation is an integral part of the teaching-learning process.

   For example, a discussion of housing problems may appraise a student's awareness of social problems. This appraisal may be used in the planning of future lessons.

5. Evaluation is a cooperative procedure concerning all individuals involved in or affected by the activity.

   Parents, administrators and students all have a contribution to make in the evaluation process. Students have a right to be informed of what they have gained from the time and effort they have put into a course.

Purpose of Student Evaluation

The purpose of student evaluation may be described in terms of the following four basic functions:

1. To improve learning through:

   1.1 assessing student achievement.

   1.2 reviewing decisions about student progress.

   1.3 establishing levels of attainment (standards) against which student achievement can be measured.

2. To provide information on student achievement for:

   2.1 advising a student and his/her parents about the progress made relative to meeting specified objectives.

   2.2 assessing the effectiveness of instructional programs.

3. To provide students with information required by post-secondary institutions and prospective employers.

4. To indicate to the public the quality of education (and its product) via student achievement.

Principles of Student Evaluation

Each student should receive a fair and just evaluation. Fairness and justness involve objectivity, equity and justice, and include:

1. Student achievement should be described in terms of performance which is norm-referenced, self-referenced and criterion-referenced.

2. Evaluation of student achievement should be both formative (continual) and summative (final).

3. Evaluation of student outcomes should extend beyond the cognitive domain to increased emphasis on the psychomotor, and affective domains.

4. Evaluation of student achievement should be based on course objectives which have been disclosed to students.

5. Student evaluation policies, regulations, procedures, and practices must be fair and just.

6. Different procedures should be used to assess student achievement. The final standing awarded in any subject should be based on a number of indicators of student achievement throughout the school year.

7. Evaluation procedures used should recognize student needs, enhance student creativity, foster appropriate teacher-student relations, and help students assess their own performance.

8. To ensure that evaluation purposes, policies, procedures and reported results are understood and communicated effectively, consultation should take place between administrative and instructional staff as well as with students and parents.

Responsibilities of Teachers

1. To provide students in advance of instruction with a clear statement concerning:

   1.1 course objectives,
   1.2 course content,
   1.3 evaluation procedures with weightings assigned to various facets of required term work and the final examination,
   1.4 other criteria to be used in evaluation, and
   1.5 procedures to appeal any final standing awarded.

2. To participate in setting course objectives, selecting course content, and determining evaluation procedures, criteria and standards through consultation on at least a school basis within any parameters specified locally and/or provincially.

3. To adhere to school board policy, system regulations and school procedures.

Planning the Evaluation

In planning the evaluation program, a number of well-defined test situations should be included and time set aside for testing in order that progress in all objectives can be assessed.

Following are a number of considerations when planning the testing program:

1. Use a specification sheet which will reflect the objectives.

2. Ensure that test items are representative of the content covered.

3. The relative weighting given test items should reflect their importance.

4. Be brief.

5. Arrange questions along diagnostic lines.

6. Use a variety of specific question types which call for thought and not recital.

7. Ensure that format and layout are appealing.

8. Use simple English.

9. Provide clear directions and give a sample answer.

10. Be sure that test items are independent of each other.

11. Recognize student abilities.

12. Interpret results.

13. Provide for follow-up.

Always determine the purpose of an examination before preparing it, keep the student in mind, determine the length of the test and plan carefully the scope and content. A general rationale for the test is imperative. It would reflect its purpose:

1. Diagnostic evaluation.

2. Grading.

3. Motivation.

4. Promotion.

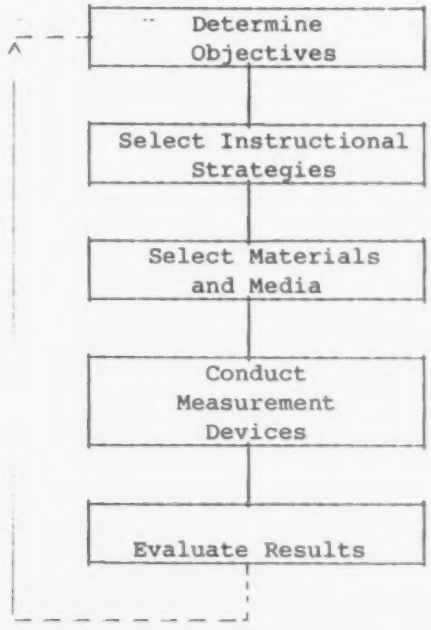
5. Effectiveness of instruction.

6. Discovering abilities and interests of students.

7. Improving course of studies and instructional materials.

8. Ability grouping.

A flowchart of these guidelines might look like this:



Evaluation Techniques and Examples

Testing Methods

1. Cognitive (Theory/Knowledge)

   Tests can be:
   - Oral (i.e., student/teacher interaction)
   - Practical (i.e., lab test)
   - Written (i.e., paper/pencil)
     a. Multiple Choice
     b. Matching Items
     c. True/False
     d. Completion
     e. Short Answer Questions
     f. Essays/Reports

2. Psychomotor (Manipulative Skill/End Product)

   Specific skills should be identified. Projects or exercises must be chosen which will expand these skills. Evaluation should be in terms of the extent to which students demonstrate these identified skills.

   #### Production/Exercise Evaluation

   With any production/exercise, expected standards must be identified before work begins.

   Components of product evaluation may include:

   - Students' work habits in relation to the equipment and materials; cooperation with others.
   - Use of resources - human/non-human.
   - Time required for completion.
   - Accuracy.
   - Final product.

For some methods, checklists and rating scales may be used by students for self or peer evaluation. A valuable comparison results when both the teacher and student use the same device to judge the same product or performance.

3. Affective (Personal Growth)

In this area, it is difficult to be objective. However, evaluation in the affective domain should be continuous. Some means used to identify and appraise behaviors by both teachers and students are:

1. Rating Scales.
2. Attitude Questionnaires.
3. Open-ended Questions.
4. Attitude Continuum.
5. Forced Choice Questions.
6. Interviewing.
7. Anecdotal Reporting.
8. Journals.

REMEMBER: Evaluation is closely allied with course planning and the objectives of a module.

Evaluation Within Subject Strands

Recommendation for student evaluation are outlined within the Teacher Manuals.

1. Accounting Teacher's Manual.
2. Basic Business Teacher's Manual.
3. Computer Processing Teacher's Manual.
4. Law Teacher's Manual.
5. Marketing Teacher's Manual.
6. Office Procedures Teacher's Manual.
7. Shorthand Teacher's Manual.

Evaluation of student performance in typewriting is outlined in a monograph.

These service documents are available from the Learning Resources Distributing Centre.

PART V:

UTILIZING RESOURCES EFFECTIVELY

COPYRIGHT

Business education teachers should be aware that copyright laws exist. They should also be aware that these same laws give writers, producers, inventors, manufacturers, and businessmen a fair return on investment. It is the responsibility of business teachers to have a working knowledge of copyright laws and to avoid flagrant abuse.

The general rules regarding copyrighted software are the same as those for print materials. When you infringe on the sales or profits of the copyright holder, you are probably in violation of the copyright law.

There is an important principle: AVOID TEACHING STUDENTS ILLEGAL OR IMMORAL TECHNIQUES ASSOCIATED WITH "PIRATING" SOFTWARE. READ CAREFULLY THE MESSAGE ON SOFTWARE.

CLASSROOM SCHEDULING

Effective use of lab space involves careful timetabling. By grouping courses into particular labs, schools can maximize access to print resources, equipment and software. Well-planned timetables that schedule classrooms effectively facilitate team teaching and resource sharing. The following chart is based on the needs of a school with 800-1,200 students and offers some suggestions for equipment for each lab.

LAB	COURSES SCHEDULED	SUGGESTED EQUIPMENT
Word Processing Lab	SH 30 OP 20/30 TY 30 WP 30 DT 20	Filing Systems, Telephone Units, Microcomputers with Word Processing Software AND/OR Dedicated Word Processing AND/OR Electronic Typewriters, Information Processors, Dictation Equipment (Model Office)
Information Processing Lab	CP (Appl.)	Microcomputers with WP/DB/ESS/GL modem
Introductory Computer Lab	CP/CL	Microcomputers
Senior Computer Processing Lab	CP (prog.)	Microcomputers (Advanced Languages) (Graphics) (Modem) (Robotics)
Theory	Law 20/30 Basic Business 20/30) Accounting 10) Marketing 20/30)	Access to Computer Labs (Adjacent) (Labs, Stores)
Keyboarding	Typewriting 10	Electronic Typewriters OR Computers with Word Processing

RECOMMENDATIONS FOR FACILITIES/EQUIPMENT AND FURNITURE FOR BUSINESS EDUCATION PROGRAMS

The relevance of a business education program depends to a large degree upon the available facilities, equipment and furniture. A more detailed reference regarding the establishment of a computer lab has been developed by the School Buildings Branch and is available under separate cover from Central Support Services of Alberta Education or Edmonton and Calgary Regional Offices of Alberta Education.

Location

1. As the business education program will need to change to reflect present business procedures, it is preferable that the facilities be as flexible as possible.

2. If possible, there is a real advantage in locating the business education classrooms on the same floor and adjacent to one another.

3. Locating the business education area in a centralized location would promote interdisciplinary program developments and the sharing of facilities.

4. While proper sound insulation can reduce the problems of noise from equipment labs, it is preferable if noisy machine areas are not adjacent to quiet-activity classrooms.

Noise, Static and Light Control

5. Lighting should be glare-free and recessed to reduce the potential eye strain from dealing with numbers, typewritten copy and computer monitor work.

6. Care should be taken to reduce static and control the dust and humidity levels.

7. Floor, ceiling and wall coverings that reduce the noise level should be used.

Learning/Teaching Aids

8. Adequate display space in the form of chalkboard, tackboard and magazine racks should be available.

9. Overhead projector with screen in each classroom, and access to VCR, tape recorders, opaque projectors and record players should provide teachers with the opportunity to make use of the extensive audio visual support materials presently available and encourage the use of teacher-prepared materials.

10. A large storage area for supplies and equipment adjacent to the business education classroom should be available. In addition to file cabinets and storage, shelving or cupboards should be available in each classroom.

11. All electrical outlets should be controlled by a main power switch and care should be taken to reduce traffic hazard when locating power outlets.

Equipment and Furniture Purchases and Maintenance

12. Decisions regarding equipment purchases should include:

    a. ability to meet course objectives.

    b. reliability and serviceability.

13. Plans for replacement of equipment by the jurisdiction could include the following:

    a. A rotating replacement (a pre-determined number of machines every year on a trade-in basis to allow for obsolescence and wear).

    b. Replace as needed through comparison of maintenance to replacement cost (has disadvantage of unequal annual capital expenditure).

    c. School boards could even consider leasing equipment, which has the advantage of a fixed cost, with service normally included.

14. Care should be taken to provide equipment and furniture that promotes the personal comfort and safety of the student.

15. A regular inventory of equipment should be undertaken.

16. Records of equipment repair and maintenance should be maintained.

17. Provision of several back-up machines will erase the pressure for immediate repair.

UPGRADING FACILITES AND MAINTAINING EQUIPMENT

The following outlines a number of points to be considered when upgrading an existing business education lab. Additional information on upgrading or establishing a computer lab is available in "Planning and Designing School Computer Facilities" prepared by Alberta Education School Buildings Branch.

1. **Determine how the lab will be used.** If the lab is to be used for theory instruction as well as skill building, desks will need to provide adequate space for notetaking and bookwork as well as for the equipment and related peripherals. The "L-shaped" desks are considered effective in providing for both activities. Alternatively, an adjoining instructional area separated from the lab area could be provided for theory instruction.

2. **Determine which courses will be scheduled in each lab** and establish procedures for the sharing of labs during the regular school time as well as during lunch hours, after school and for evening credit programs. Answer questions such as: If the lab is to have shared access by a number of teachers, and/or courses, who will be responsible for ongoing care of hardware, software and supplies?

   If more than one lab is available, will one be designated for specific purposes? For example, a lab equipped to offer courses which require productivity software (word processing, data base, spread sheets, and/or general ledger) needs to be equipped with dual disk (or hard disk) drives and more printers than does a lab scheduled for introductory programming courses.

3. **Consider factors that may affect the instructional environment and the comfort and health of the students;** e.g., ready exit from room (no obstruction which would delay students), adequate space for the teacher to move around room and to provide individual assistance, lighting which does not cause glare or eye strain, ability of teacher to observe all students (and screens) in the classroom, ability of students to view the teacher and the instructional displays from their work stations, noise level which is as low as possible, and adequate work space and privacy for examinations, and individual work assignments.

4. **Consider factors that may affect the machine-life of the equipment;** e.g., excessive and/or unregulated heat, static and humidity controls, dust/air pollution, adequacy of power, central control of power, control of power surges, and backups for power failures.

5. **Consider factors that affect the security of hardware and software;** e.g., procedures for access to the equipment and software in a lab situation and during non-instructional times, secure storage for software, security systems for the labs (safeguards to windows, doors, ceiling), security of peripherals and other hardware enhancements, maintenance of hardware and software inventory procedures, control of potential breach of copyright.

6. **Consider factors that impact school and school system budgets;** e.g., regular and emergent maintenance costs and procedures, inservice costs, utility costs, supplies costs, distribution procedures and policies for supplies, control procedures for telecommunications costs, and equipment replacement costs.

The following list identifies equipment recommended to UPGRADE the business education labs. Additional items are included when a new school is establishing business education labs. Further information on equipment is available from the Business Education Consultants in Edmonton and Calgary Regional Offices of Alberta Education.

Equipment List to Upgrade Business Education Lab

Minimum No. of Units						Description
MP	AC	CP	MK	OP	TY	
25			1	25	25	Typewriters - electric/electronic, AND/OR
25	12	25	1	25	25	Microcomputer Unit with CPU (64K minimum), monitor, (capacity for 80-column character display) specified firmware. Dual disk drive and/or hard disk with back-up facility, AND/OR 911.1 Dual Disk Drive 911.2 Hard Disk Drive 911.3 Monitor 911.4 Firmware
25				25	25	Typewriter - electronic with memory, AND/OR
2				2		Word Processor (stand alone) with suitable work station and software
25	12	25	2	25	25	Specialized Work Station (desk) complete with power bar, work space (78 cm in height) and run off for computer or typewriter (68 cm in height)
25	12	25	2	25	25	Chairs - swivel, posture support, adjustable height

Minimum No. of Units						Description
MP	AC	CP	MK	OP	TY	
1	1	1	-	1	1	Network System
1	1	1		1	1	Demonstration Monitor with stand
8	3	6	1	8	8	Printer Unit with sound cover and printer work station with paper storage
12	25		12			Calculators - electronic, dual display with memory
1		1				Modem/Multiplexer
2		2				Graphics Tablet
1			2			Cash Registers with Optical Scanner, and facility to communicate with microcomputer
1			1			Video Camera and Cassette Recorder
25	25	25				Number Pads
				1		Light Table
				1		Photocopier with collator
				1		Demonstration secretarial desk, single pedestal with return
1				1		Demonstration file cabinet with guides, charge out cards, file wallets
25				25		Transcription Unit (4 with dictation facility)

MP - Multi-purpose Lab
AC - Accounting Lab
CP - Computer Processing Lab
MK - Marketing Lab
OP - Office Procedures Lab
TY - Typewriting Lab

SOFTWARE INTEGRATION WITHIN BUSINESS EDUCATION PROGRAM

As noted in "Part 1: Planning the Business Education Program", the business education curriculum integrates computers. (Refer to pages 15-17.)

This involves three types of software support:

1. CAI - Curriculum Assisted Instruction.
2. Productivity - packages such as word processing, electronic spread sheet, data base, and general ledgers.
3. Utilities - packages such as telecommunications, windowing, student record systems, test generators, etc.

A number of these packages have been approved and are available from the Learning Resources Distributing Centre.

The following chart outlines which courses integrate the productivity software. All courses could benefit from access to suitable CAI or utility software.

Productivity Software Integrated Within Revised Business Education Program

	Integrated into the Curriculum in:		
Function	Subject Area Strand	Required for Modules	Recommended for Modules*
1. Word Processing	Computer Processing		All (8-14) in particular)
	Office Procedures	14. Word Processing 1 15. Word Processing 2	1, 2, 3, 6, 8, 9, 12, 13
	Shorthand		3 - 10
	Typewriting		3, 5-10
	Optional	4. Applications: Word Processing	2

* CAI and/or work station

Function	Integrated into the Curriculum in: Subject Area Strand	Required for Modules	Recommended for Modules*
2. General Ledger Accounting	Accounting	13. Accounting Simulation II 6. Optional Accounting Tasks (Topic 5)	4 - 13
	Basic Business		4, 5, 8
	Marketing		2, 7
3. Electronic Spread Sheet	Accounting		4 - 13
	Basic Business		2, 4, 7
	Computer Processing	3. Applications: Data Entry 7. Applications: Electronic Spread Sheet	2, 5
4. Data Base	Basic Business		1, 5, 6, 7, 8
	Computer Processing		3, 4, 5, 6, 7
	Office Procedures	6. Applications: Data Base	1, 2, 5
	Optional		8, 9
5. Integrated Packages	Suitable Support for Word Processing, Data Base, Electronic Spread Sheet	See above	See above

* CAI and/or work station

INVENTORY CONTROL

The business education program requires considerable equipment and resource support. Teachers may be responsible for keeping track of these materials, and ensuring the equipment is secure, and maintained. If an inventory control system is not in place, one should be established. An accurate inventory system will reap necessary information when recommendations for additional purchases are required.

A list of equipment recommended for business education programs is available from business education consultants.

A common practice has been to prepare an inventory card for each item. These cards are completed when a piece of equipment is purchased and thereafter serve as a maintenance record. An example of such a card is shown in Appendix 5.

Accessories and support materials should be included when preparing a computer inventory (boards, cables, accessories, peripherals, etc.).

Resources and references (print, software, media texts, workbooks) which are used for each course should be identified and recorded.

SAFETY AND HEALTH

Appendix 4 contains a safety and health checklist. This checklist makes reference to the adequacy or general physical condition of desks, chairs, lighting, exit routes, and supply of electricity. Principles of good housekeeping are also noted. Teachers should be cognizant of these guidelines and attempt to maintain the highest standards possible.

PART VI:

PROFESSIONAL DEVELOPMENT

CLASSROOM MANAGEMENT

Managing a business education classroom in any setting, rural or urban, can be a challenge even for the most effective teachers. One thing is clear: effective classroom management is closely associated with instructional success. As a result, it is important for the teacher to develop an appropriate style of classroom management. The following are several points to consider:

1. Preparation of the Classroom

   Consider the location of equipment, instructional materials, and traffic patterns. The classroom should be neat and attractive, reflecting proper business standards. Suitable displays add to the instructional process and make the room more attractive. Visibility, storage space, and access to audio visual supplies are also important.

2. Planning Rules and Procedures

   Develop effective administrative routines, efficient small group procedures, and procedures for submission of assignments and written tests. The students should understand the rules and procedures and be confident that they will be applied fairly and consistently.

3. Consequences

   Let students know about any consequences which would result in the event of broken rules. Reward appropriate performance and/or behaviour. Clearly define negative consequences. Signal appropriate behaviour. Always present, review and discuss classroom rules and procedures. Try to handle inappropriate behaviour in a positive manner.

4. Strategies for Potential Problems

   Develop a routine for managing interruptions and handling students with behavioural problems.

5. Monitoring

   Constantly monitor student performance. Tell students when they are doing well. Focus on the positive aspects of the performance. Provide assistance where and when needed.

6. Organizing for Instruction

Consider attention span of students and the difficulty level of material. Always plan activities in advance of the lesson. Provide for enrichment, and plan for time to address individual needs. Structure long-range and short-range plans. Record necessity for remediation and plan how the program is to be implemented.

7. Student Accountability

Constantly monitor whether or not students understand the material. Enforce work standards and deadlines consistently. Develop suitable routines for assigning, checking, and collecting work.

8. Instructional Clarity

Describe clearly the objectives and goals of lessons being presented. Provide clear directions. Pace drills and lectures appropriately. Provide clear explanations and presentations.

Successful teachers have found that the physical comfort of students affects their performance. As a result, it is important to ensure that the classroom atmosphere is conducive to effective learning.

INSTRUCTIONAL SUGGESTIONS

Learning takes place more readily under some conditions than under others. Learning is an active process on the part of the learner and it is continuous. The challenge for the teacher is, of course, to develop an instructional approach most suitable to himself and the student involved. A teacher must always remember that numerous factors affect learning.

A basic problem of learning in a group situation is attributable to the uniqueness of the individual. Providing for individual differences is a primary concern of the teacher.

The teacher must know something about the various abilities of the students in order to individualize instruction. Which student has difficulty learning? Is handicapped? Needs to be challenged? Is superior? Is average? Is not motivated? Has poor work habits?

As the business education courses are optional, it is inevitable that the business teacher will encounter a broad range of reading abilities, levels of intelligence and motivation. Dealing with this challenge involves applying a number of teaching strategies, a basic understanding of the various types of learning preferences, and skill in integrating the theory into the classroom.

The following factors influence teaching methodologies:

1. Students

   What are their ages? Abilities? Background? Mental, physical, and emotional health?

2. Materials

   Is it abstract or concrete? Complicated or easy? Familiar or new? Does it lend itself to providing for individual abilities?

3. Objectives

   What is the basic objective? What is the most effective way to meet that objective?

4. Physical Environment

   Is the necessary equipment available? Is the room adaptable to the lesson objectives?

5. Cost

Will there be added cost? To whom? Are funds available? Where?

6. Teacher

Does the teaching methodology suit the teacher?

7. Time

Is sufficient time available? Is the timetable appropriate?

8. Interest

Is the material presented in an interesting manner? Does the teacher give the impression of interest in the topic?

A teacher can use a variety of teaching methods: where the activity centers around the teacher, where activity centers around the student, or where experimental and high technology techniques are used. Following is a summary of the most popular teaching methodologies:

- Lecture
- Textbook assignment
- Workbook
- Question and answer
- Discussion
  - spontaneous
  - planned
  - adversary
  - panel
  - small group
  - seminar
  - debate
- Committee and group work
- Problem-solving
- Research
- Case study
- Simulation and role-playing
- Brainstorming
- Demonstration

The program and learning environment can be enriched through:

- Bulletin boards
- Field trips
- Research
- Speakers
- Team teaching
- Races (competitions)
- Mobile laboratories
- Television
- Programmed instruction
- Audio visual media
  - motion pictures
  - filmstrips
  - slides
  - opaque projector
  - overhead projector
  - videotape
- Computer access

PROFESSIONAL DEVELOPMENT

Teachers of business education courses must be generalists, yet must be sufficiently specialized in order to provide a sound basis for the skills and knowledge students will need to develop at this level. As a result, ongoing professional growth activity is very important. Ensuring that a teacher possesses the most recent information about complex topics such as microcomputers and their application to business courses will help to ensure that he/she motivates and challenges the students.

Professional growth should reflect a commitment to the student, the community, and the profession. There are a number of ways in which a teacher can maintain professional growth. Following are a few ways in which a business teacher can plan a "professional growth" program:

1. Regularly attend meetings, workshops, seminars, institutes, clinics, and conferences scheduled for business teachers.

2. Serve on panels of teachers for the purpose of discussing problems related to business education.

3. Hold membership in one or more professional teachers' organizations.

4. Visit other business education classrooms.

5. Visit exhibits featuring business education equipment and teaching materials.

6. Visit business offices to observe and study the duties and requirements of business education graduates.

7. Conduct follow-up studies on graduates.

8. Work in a business office.

9. Experiment with innovative teaching practices.

10. Use suggestions from students to improve teaching.

11. Review new resources available from publishing companies.

12. Share resources, ideas and concerns with other teachers - those in business education and/or other areas.

Professional reading should, for example, include publications of professional associations such as Business Education Council, International Society of Business Educators, Western Business Education Association and National Business Education Association. Teachers should consider reviewing magazines that focus on technology and specific subject areas.

APPENDICES

APPENDIX 1

School Reference Sheet: Business Education Courses

YEAR ___ TO ___

This form could serve as a record of business education programs as well as offer assistance to those involved in scheduling programs, registering students, making awards, and budgeting.

COURSE NAME _____ CREDITS _____ COURSE NO. _____

In-school name (if different from above) _____

PREREQUISITE(S) _____ (Required)
NONE _____ (Recommended)

COREQUISITE(S) _____
NONE _____

PREREQUISITE TO _____
NONE _____

MODULE NO.	C or E	MODULE NAME	CLASSROOM/LAB
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

COURSE DESCRIPTION: (A summary of course objectives that could be used in school handbook or for student registration.)

GUIDANCE RECOMMENDATIONS:

Supports preparation for _____,
post-secondary program at _____.

Of general interest to all students.

Supports preparation for job-entry in secretarial career.

Supports preparation for job-entry in business management career.

Suitable for students with learning difficulty.

Can be applied to _____ certificate.

Includes work study component.
Coordinates with work experience.
Includes lab experience on _____.

EXPECTATIONS FOR STUDENT SKILL/KNOWLEDGE

SCHEDULING RECOMMENDATIONS

Preferably taught 1st/2nd semester.

Preferably offered in _____ periods.

Preferably offered to students in grade(s) _____.

Preferably offered back-to-back with _____ to allow student transfer.

Preferably taught before the following course(s) _____
_____.

Preferably taught after the following course(s) _____
_____.

Lab/classroom equipment needs _____
_____.

COST ESTIMATES (19__ to 19__)

Basic Resource Purchases _____ $ _____
_____

Recommended Resource Purchases _____ $ _____
_____

Supplementary Resource Purchases _____ $ _____
_____

Software Needs _____ $ _____
_____

Equipment Needs _____ $ _____
_____

Furniture Needs _____ $ _____
_____

APPENDIX 2

Scheduling Modules

COURSE _____ CREDITS _____

PREREQUISITE(S) _____

	Date Start	Date End
Modules No. ___ = ___ classes @ ___ minutes (C or E)	_____	_____
No. ___ = ___ classes @ ___ minutes (C or E)	_____	_____
No. ___ = ___ classes @ ___ minutes (C or E)	_____	_____
No. ___ = ___ classes @ ___ minutes (C or E)	_____	_____
No. ___ = ___ classes @ ___ minutes (C or E)	_____	_____

	Module No.	Module No.	Module No.	Module No.	Module No.
Total Classes Available					
Instruction/ Assignments/ Marking					
Speakers, Field Trips, Audio-Visual Presentations					
Quizzes/ In-class Marking					
Review					
Module Exam					

THIS FORM CAN BE USED TO HELP PLAN THE NUMBER OF CLASSES ALLOCATED TO EACH MODULE.

Planning Worksheet : MODULE _____ FROM _____ TO _____

_____ classes @ _____ minutes

Date	Topic	Classes	Concepts (Learning Tasks)	References (Resource)	Assignments, Quizzes	Weight		Methodology/ Motivation	Speakers/AV/ Field Trips/etc.

Business Education Safety and Health Checklist

NAME OF SCHOOL: _____

NAME OF LAB: _____

TEACHER: _____

DATE: _____

General Physical Condition

1.	Machines, desks, and other equipment are arranged to conform to good safety practices	S	U	NA
2.	Aisles are unobstructed	S	U	NA
3.	Illumination is safe and sufficient	S	U	NA
4.	Exit routes are adequate and properly identified	S	U	NA
5.	All electrical switches, outlets, and floor pedestals are enclosed and in good working order	S	U	NA
6.	Chairs and tables are in good condition	S	U	NA
7.	Other: _____	S	U	NA

Housekeeping

1.	General appearance is orderly	S	U	NA
2.	Filing cabinets are not overloaded (top heavy) and are in good operating condition	S	U	NA
3.	Supplies are stored in an orderly and safe manner	S	U	NA
4.	Toxic, combustible, and flammable liquids and supplies, such as duplicating fluid, etc., are stored in appropriate containers	S	U	NA
5.	All electrical cords for machines such as typewriters are in good condition and in good working order	S	U	NA

6. Exterior surfaces of all equipment are properly cleaned . . . . . S U NA

7. Telephone(s) is(are) regularly disinfected, especially the mouth and earpiece . . . . . S U NA

8. Earphones for dictation and transcription equipment are disinfected immediately after use . . . . S U NA

9. Other: _____ S U NA

_____

Summary of Recommendations

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

(Signature)

S = Satisfactory
U = Unsatisfactory
NA = Not Applicable

_____

(Date)

Equipment Inventory

School: _____ Room: _____

Department: _____ School Number: _____

Machine	Make	Serial Number	Supplier	Received	Disposal

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APPENDIX 5

Service and Repair Record

Repairs Required	Date	Teacher's Initials	Repairman	Date	Time

A Checklist for Purchasing Computers

TO OPTIMIZE THE VALUE OF YOUR PURCHASE DOLLAR, YOU SHOULD CONSIDER

1. Does the equipment have adequate memory to run the software used in the courses offered in business education? Other courses?

2. Is the facility suitable for the purposes of business education? Are furniture and fixtures appropriate?

3. Will the skills developed be transferable to business occupations (i.e., keyboard standard, touch typing)?

4. What quality and quantity of support is available from the vendor and/or supplier:

   4.1 Warranty period?
   4.2 Inservice support? Tutorials? Workshops? Audio visual materials?
   4.3 Service: Contracts? Turnaround time on calls? Replacements?
   4.4 Maintenance training?

5. Is there any information about product reliability?

6. Are there sufficient number of the brands in use to indicate product reliability and attract software developers?

7. Is the equipment/software user-friendly? Is there limited potential for abuse?

8. Is there a potential to upgrade? To expand the power of the computer?

9. Is the product compatible with other computer systems? Is the software interchangeable? Are periodicals available?

10. Assess operational costs: software, printer paper, ribbon, print and disks.

11. Are modifications to facility necessary to provide a proper ergonomics environment (i.e., screen glare, static control)?

12. Is there a local user's group?

13. What is the vendor's policy regarding compatibility with its new models? With other manufacturers' models?